

Defence Spending Review

Final Report

July 2020

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Introduction and Summary

This spending review is a part of the Value for Money project which aims to reform rules, set up processes and reinforce institutions that will support the adoption of sound decisions in the public interest and significantly increase the value for money in Slovakia's public sector.

The spending reviews will cover most of public expenditure for the electoral term. The proposed measures will enable fiscal savings, improved public service delivery to citizens and/or reallocation of funding to support the Government's priorities. The review provides measures that are sustainable over the long term.

In developed countries, spending reviews are a standard tool helping Governments to identify room in public policies for a more effective use of public funds and for the savings necessary to honour fiscal obligations at national and European level.

The fifth year of spending reviews focuses on expenditure which has an impact on the social inclusion of groups at risk of poverty and social exclusion, the public wage bill, defence expenditure, Ministry of Interior expenditure (public administration and security) and expenditure on culture. The Final Reports from the spending reviews identify areas with the largest room for improvement in the effectiveness of spending and propose measures with deadlines.

In order for those goals to be achieved, recommendations must be based on extensive and high-quality data. Despite the official tasking as per Government Decree No 188/2019 and repeated requests for cooperation, the Ministry of Defence of the Slovak Republic provided only partial data to the Ministry of Finance, which limits the depth of analysis on some topics. The Value for Money Division collected and analysed data until March 2020 and made the best possible use of the available data. Strategic documents and objectives developed thereafter are not included in this material. After the finalisation of the strategic documents, including the 2021 NATO Capability Targets, it will be possible, in cooperation with the Ministry of Defence of the Slovak Republic, to prepare a more detailed analysis and propose additional measures.

This review aims to contribute to the meeting of objectives in defence by putting greater emphasis on the effectiveness of spending, and to improve defence performance focusing on the priority objectives in defence. The review is based on the approved proportion of GDP devoted to defence and on the commitments made by NATO member countries.

Slovakia's defence expenditure has been comparable over the long term to the reference countries¹, and lower than the EU NATO member countries. Based on NATO methodology, defence expenditure in 2019 reached EUR 1.67 billion (1.74% of GDP). NATO member countries in the EU spent an average of 1.35% of GDP in 2012-2018; the average for the F3 countries was 1.11% of GDP. The average for Slovakia and the C3 reference countries for the same period was 1.09% of GDP.

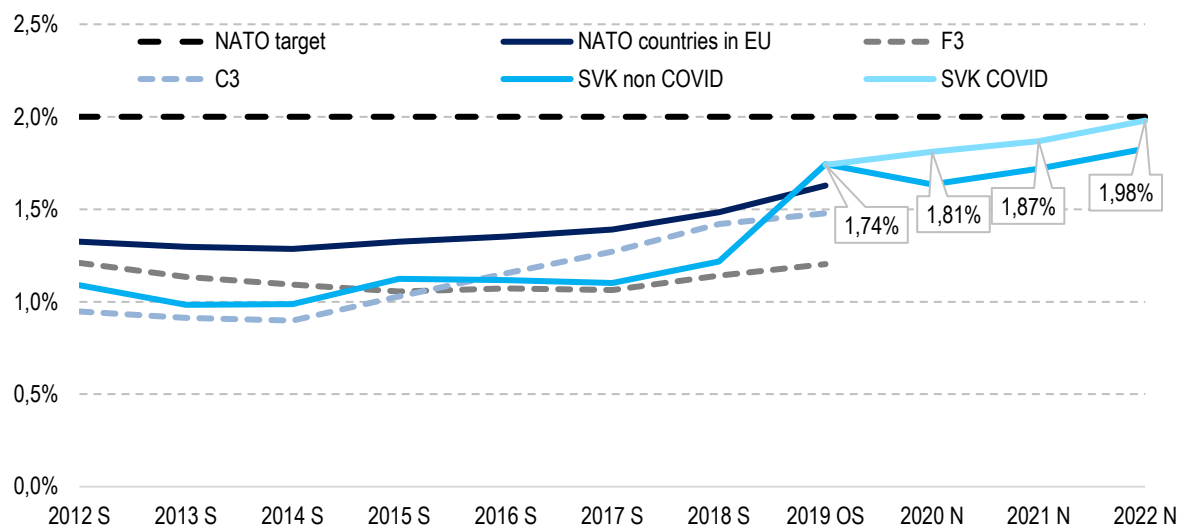
The growth of Slovakia's defence spending between 2012 and 2019 was among the four highest of all NATO members. The historically highest year-on-year increase, from EUR 1.11 billion to EUR 1.62 billion², was recorded in 2019; most of the increase was attributable to the purchase of F-16 fighter jets. The growth of expenditure on defence reflects a NATO-wide trend.

The crisis caused by the coronavirus pandemic has substantially reduced the performance of the economy. Should the planned level of nominal expenditure in the general government budget be maintained, Slovakia's defence expenditure would reach 2% of GDP in 2022.

¹ To provide more relevant international comparisons, a group of reference countries was identified. The reference group includes Central and Eastern European countries with a similar baseline position (Czech Republic, Hungary, Lithuania: C3), and a group of selected Allies which may serve as models for Slovakia's defence ambitions and objectives (Denmark, Belgium, the Netherlands: F3).

² According to the drawing of the programme budget 2019.

Defence expenditure overview (% of GDP, NATO methodology)

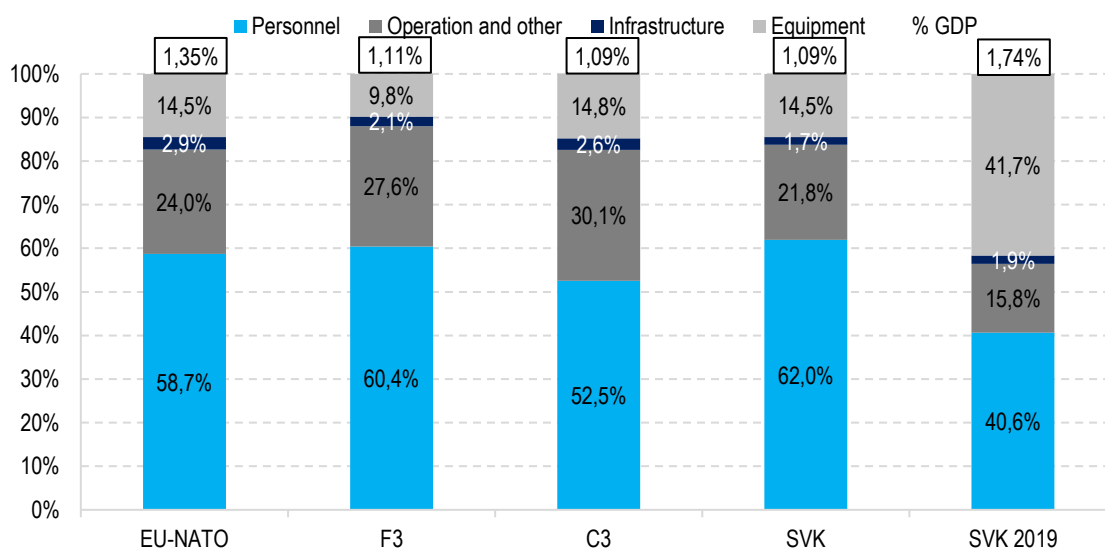


Note: SVK non-COVID according to pre-crisis GDP estimates. SVK COVID relates the expenditure initially planned for 2020-22 (according to the MOD report to NATO) to the current GDP estimate (IFP, April 2020). Averages are calculated as arithmetical averages; data may differ from NATO graphs which use weighted average.
S = Actual; OS = Expected; N = Draft Budget

Source: NATO, 2019fg, (constant prices 2015); data of MOD 2019, IFP 2020. Analysis: VfMD

In 2012-2018, Slovakia had above-average expenditure on personnel and below-average expenditure on operations and infrastructure. Expenditure on modernisation is average when compared to the reference groups, although the 20% share of the defence budget that NATO recommends to spend on major equipment and associated research and development has only been spent in the last two years. An important change occurred in 2019 when the acquisition of F-16 fighter jets almost tripled the previous average equipment expenditure, substantially exceeding that of all reference groups. Reflecting a long-term problem, expenses on operations and infrastructure remained below average.

Defence expenditure: structure and GDP share (average for 2012-2018, SVK 2019)



*2019 is NATO estimate

Source: NATO, 2019fg. Analysis and calculations: VfMD

Slovakia does not meet the strategic objectives and outcomes that it expects from the defence effort, nor does it meet those to which it has committed as a NATO member. The key objective of defence is to protect the security of Slovakia and its Allies with the use of its own armed forces and the means of collective defence.

Furthermore, the objective of defence is to contribute to peace, stability and security through the deployment of armed forces in operations and missions outside Slovakia's territory and to support public authorities in domestic crisis management. Slovakia has long been unable to deliver on the NATO Capability Targets, representing its agreed national contribution to collective defence, in the required quantity, quality and on time. Not only do the Armed Forces of the Slovak Republic (AFSR) provide only 80% of the requested units but deliver them in sub-standard quality. In 2019, Slovakia fulfilled only 39% of the qualitative Capability Targets. The worst performing military branch are the land forces, Slovakia's key contribution to NATO and the core of its armed forces. Until 2018, operational readiness had also declined. The third indicator, measuring performance in international operations, shows that while Slovakia is able to deploy the required number of land force (but not air force) personnel outside its territory, it takes more effort than would be desirable.

Given the absence of publicly available information, informed expert debate on defence performance is lacking in Slovakia. The reason is a reluctance to disclose key documents and data that are publicly accessible in other countries. The quality of discussion and the meeting of defence objectives could be improved if input and outcome indicators were assessed in the general government budget.

To support long-term capability development and the execution of an appropriate investment strategy, this review demands the development of a capability requirements catalogue, a new Generic Force Structure (2035) and a new Long-Term Capability Development Plan for defence. The new documents should respect the value-for-money principles and support the fulfilment of the Slovak Republic's strategic goals and defence commitments. The achievement of better outcomes in defence is challenged not only by the availability of funding, but also by a preference for consumption costs over maintenance and modernisation, as well as by the implementation of investment projects that make a low contribution to the achievement of objectives.

This review demands that until the new Generic Force Structure (2035) has been defined, Slovakia should invest in projects that are relevant to all possible alternatives of the yet to be agreed 2021 NATO Capability Targets and in the basic infrastructure of the AFSR. Investments should prioritise combat support, combat service support and the preservation of the existing combat potential of the combat units of the AFSR.

This review demands that both suspended and planned armaments projects should be reconsidered in light of the new Long-Term Capability Development Plan. Optimizing projects in accordance with the 2017 Capability Targets would make it possible to reallocate EUR 2.0 to 2.3 billion toward the most important priority projects in the near term. However, the new strategic documents will also assess projects against national requirements. A part of the costs associated with the 2017 Capability Targets is yet to be quantified. **This review demands that all future capabilities and tasks of the new F-16 aircraft squadron are identified and that all acquired platforms are used in the most efficient way in military, economic and political terms.**

Overview of investments of the Ministry of Defence by 2017 Capability Targets

Known-priority projects	EUR million	Other planned projects	EUR million
New IFV	871 – 1 500	8x8 APC	411
New tank	258+	Non-priority part of 4x4 AMPV	612
Priority part of 4x4 AMPV	170	Upgrade of the S-300 system	605 – 708
Priority part of radars	102	Replacement of 2K12 KUB systems	360 – 470
Other heavy brigade equipment	332+	Non-priority part of radars	53
Total	1,733 – 2,362+	Total	2,041 – 2,254

Source: NATO, 2017; MOD, 2017d; GS AFSR, 2018b. Analysis: VfMD

In comparison to the average wage in the economy, Slovak professional soldiers are paid higher than the median of their counterparts in the reference countries. In 2019 and 2020, military pay grew faster than the pay of most employees in the public service. Based on new legislation, another increase of at least 20% is

envisaged in 2020. The number of employees in the command structure and their wages exceed the median in the reference countries; the command structure also employs more soldiers than civilians.

Optimizing personnel expenses could bring annual savings of over EUR 114 million. Personnel expenses will be the major limitation on how much funding can be allocated for investment and modernisation, particularly should the number of military personnel increase. This review proposes to conduct a detailed optimisation audit of the Ministry of Defence and the Armed Forces with the aim of identifying options for saving at least 10% on personnel. International comparisons, lessons from other organisations and existing yet unimplemented cost saving projects indicate that this target is realistic.

Further savings are achievable on operating expenses, which this review has not mapped out in detail. Better procurement of goods and services is one of possible options; this review analysed in detail only 5% of such expenditure. This review demands that the potential for savings in other areas should be quantified.

Spending Review Measures

This review proposes the following key measures to improve defence performance:

- Develop a new capability requirements catalogue, a Generic Force Structure (2035), a Long-Term Capability Development Plan and a methodology for the assessment of investment projects and their contribution to the achievement of goals and outcomes in defence;
- Optimise personnel expenses of the Ministry of Defence and the Armed Forces. The potential for savings in the areas reviewed by this study is estimated to exceed EUR 114 million annually; other areas of operating expenditure may bring further savings;
- Set up investment planning and project implementation processes to improve the effectiveness of future defence expenditure. This review identifies ineffective modernisation projects from which funds could be reallocated to support the fulfilment of Capability Targets;
- Improve the measuring, reporting and evaluation of key defence indicators and introduce a public assessment of performance against Capability Targets and operational readiness targets.

Table 1: Saving measures proposed by the spending review versus no-policy-change scenario

		Saving potential						
Measure / Sub-measure	Potential, structural (EUR million)**	2020	2021	2022	2023	Responsibility	Deadline	
1 Save 10% on personnel expenses (optimisation audit)	12.3	-4.1	12.8	13.5	14.1	MOD SR	31 Dec 2020	
1.1 (of which) Optimise support activities of the MOD	1.3 – 2.4		1.0	1.7	2.7	MOD SR	31 Dec 2020	
2 Optimise personnel expenses of AFSR command structures	TBD*		5.1	11.3	17.7	MOD SR, GS AFSR	31 Dec 2021	
3 Freeze expenses on wages of professional military personnel until they reach the same level as those of the reference group	101.9	0	16.0	35.5	55.4	MOD SR	annually	
4 Optimise operating expenses not covered by this review (subject to analysis)	TBD		TBD	TBD	TBD*	MOD SR, MoF SR	31 Mar 2021	
Total	114.2+	-4.1	33.9	60.3	87.2			

* EUR 77 million according to MOD data; the data requires validation; this may overlap with Measure 1 for a part of civilian employees ** As of 2020. Structural potential is the amount of savings if fully realised in the first year Source: VfMD, 2020

Table 2: Investment management

Measure	GGB reallocation 2020 -2022 (EUR million)	Responsibility	Deadline
5 Develop a unified capability requirements catalogue covering national defence tasks and international commitments		MOD SR, GS AFSR, MoF SR	31 Jul 2021
6 Develop a new Generic Force Structure (2035) including a fiscally feasible peacetime structure and a wartime structure		MOD SR, GS AFSR, MoF SR	31 Jul 2021
7 Prepare a Long-Term Capability Development Plan based on the new Generic Force Structure (2035), reflecting the need to build priority capabilities within timeframes corresponding with their importance and plan a stable and foreseeable investment budget		MOD SR, MoF SR	31 Dec 2021
8 Prepare a methodology for the assessment of MOD investment projects		MOD SR, MoF SR	31 Mar 2021

Table 2: Investment management

Measure	GGB reallocation 2020 -2022 (EUR million)	Responsibility	Deadline
9		MOD SR	continuously
10		MOD SR	continuously
11		MOD SR, MoF SR	31 Dec 2021
12	1,890 (Defence Development programme)	MOD SR, MoF SR	31 Jul 2021
13		MOD SR	30 Sep 2020
14		MOD SR, GS AFSR	31 Dec 2021
15		MOD SR, MoF SR	continuously
16		MOD SR	31 Dec 2020
17		MOD SR, MoF SR	continuously
18		MOD SR	continuously
19		MOD SR	30 Sep 2020

Source: VfMD, 2020

Table 3: Management measures proposed by the defence spending review

Measure	Responsibility	Deadline
20	Government of the SR, MOD SR, MoF SR	31 Dec 2024
21	Government of the SR, MoF SR, MOD SR	continuously
22	MOD SR	continuously
23	GS AFSR, MOD SR	31 Dec 2020
24	MOD SR	annually
25	MOD SR	within 30 days of approval by NATO Defence Ministers
26	GS AFSR, MOD SR	31 Dec 2020
27	MOD SR	31 Dec 2023

Table 3: Management measures proposed by the defence spending review

	Measure	Responsibility	Deadline
28	Modify the MOD's internal processes so that budgeting is governed by the Programme Plan and the Long-Term Capability Development Plan	MOD SR	31 Dec 2020
29	Present the new Long-Term Capability Development Plan to the National Council of the Slovak Republic for approval in accordance with the Law on Defence of the Slovak Republic	Government of the SR, MOD SR	31 Mar 2022
30	Complete the setting-up of the Analytical Unit of the MOD in accordance with the methodology for building analytical capacities in public administration	MOD SR	31 Dec 2021
31	Quantify the costs associated with the fulfilment of Capability Targets and the achievement of full operational capability of the heavy infantry brigade in line with NATO standards	MOD SR, GS AFSR	31 Dec 2021
32	Ensure that defence expenditure is reported in the general government budget and to NATO in strict compliance with NATO methodology	MOD SR, MoF SR	continuously
33	Align the programme structure of the budget and of the Programme Plan of the MOD as well as the corresponding key outcome indicators with the recommendations of this spending review	MOD SR, MoF SR	31 Mar 2021
34	Define the key outcome indicators for the MOD chapter of the general government budget in accordance with the recommendations of this spending review	MOD SR, MoF SR	31 Aug 2020
35	Review the military retirement pension system	MoF SR, MOD SR	30 Jun 2021
36	Carry out a comparative analysis of non-financial benefits of military personnel	MOD SR, MoF SR	30 Jun 2021
37	Include in the general government budget the international comparison of wages of professional military personnel and the structure of defence expenditure in line with NATO methodology	MOD SR	30 Sep 2020

Source: VřMD, 2020

1. Defence Expenditure

- In the years 2012 - 2018, Slovakia's defence expenditure was below the average of the EU-NATO member countries and about equal to that of the reference groups. Slovakia has achieved the Alliance's fourth highest rise in defence expenditure since 2012.
- An above-average proportion of defence expenditure is spent on personnel; a comparable proportion is invested in equipment. Below-average spending, when compared to the reference groups, includes operational costs, training of the armed forces and infrastructure.
- With equipment expenditure in 2019 substantially higher than the long-term average, the structure of total defence expenditure in 2019 reflected the need to modernise equipment, but failed to allocate sufficient funding for its operation.
- In 2019, the spending of the Ministry of Defence amounted to over 99% of the total defence expenditure. The Economic Mobilisation budget programme, being the largest of the four inter-agency budget programmes, accounted for 0.5% of defence spending without the MOD contribution.
- The MOD budget chapter provides funding to nine budgetary organisations and two subsidiary organisations. Their 2018 state budget expenditure reached EUR 87.2 million and expenditure funded from other sources amounted to EUR 24.7 million.

1.1. International Comparisons

According to NATO estimates³, Slovakia's defence expenditure of 2019 was EUR 1.67 billion (1.74% of GDP). The average for the EU-NATO member countries for 2012 to 2018 was 1.35% of GDP; the average for Slovakia was 1.09 % of GDP. Compared to the countries taken as reference in this review (refer to Box 1), relative defence expenditure was virtually equal (Graph 1). Based on preliminary data available for 2019, Slovakia's defence expenditure as a percentage of GDP outstripped that of all reference groups. The expenditure seems to be undervalued by approx. 0.03% of GDP (refer to Box 1).

The growth of Slovakia's defence expenditure between 2012 -2019 reached 111% (0.65% of GDP)⁴ and was among the four highest rates of the Alliance. The historically highest year-on-year increase, from EUR 1.11 billion to EUR 1.62 billion⁵, was seen in 2019. The growth of expenditure reflects the trend prevailing in the entire NATO. In response to the worsening of security environment, most member countries plan achieving the defence expenditure level of 2% of GDP by 2024, of which 20% is to be on equipment (NATO, 2019d). In 2018, the pledge to allocate 2% of GDP to defence was met by six out of the 28 member countries (Estonia, Greece, Latvia, Poland, United Kingdom and USA); estimates are that they could be joined by further three countries (Bulgaria, Lithuania, Romania) in 2019 (NATO, 2019f).

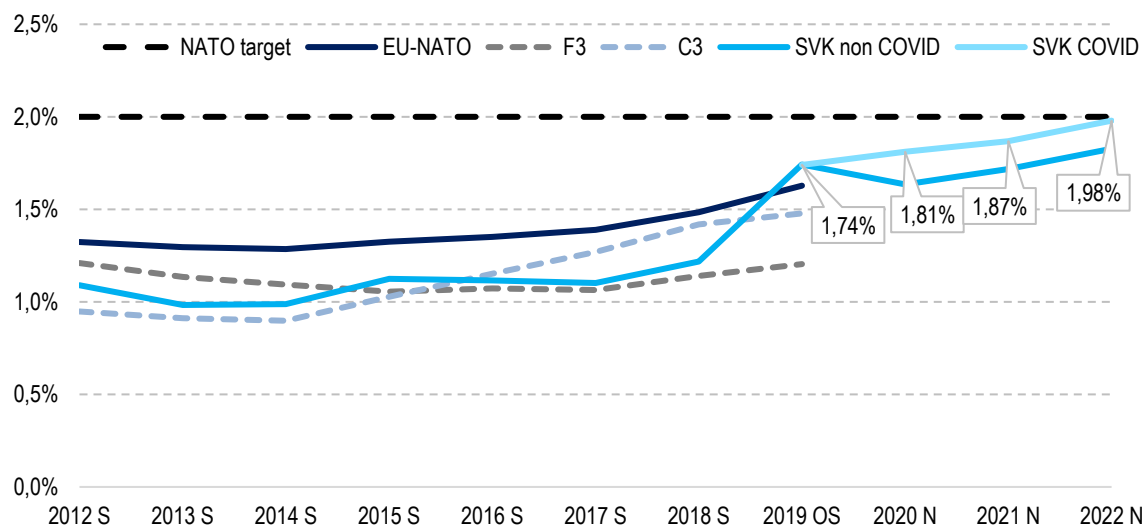
The crisis caused by the coronavirus pandemic has markedly reduced the performance of the economics. With the planned level of nominal expenditure allocated in the general government budgeted, Slovakia would reach the defence expenditure level of 2% of GDP in 2022.

³ For comparison of the different methodologies refer to Annex 2: Different defence expenditure calculation methodologies.

⁴ In constant 2015 prices

⁵ According to the implementation of the programme budget 2019

Graph 1: Defence expenditure overview (% of GDP, NATO methodology)



Note: SVK non-COVID according to pre-crisis GDP estimates. SVK COVID relates the expenditure initially planned for 2020-22 (according to the MOD report to NATO) to the current GDP estimate (IFP, April 2020). Averages are calculated as arithmetical averages. Data may differ from NATO's graphs using weighted average.
S = Actual; OS = Expected; N = Draft Budget

Source: NATO 2019fg, (constant prices 2015); data of MOD 2019, IFP 2020. Analysis: VfMD

Box 1: Defence Reference Group

The reference group was chosen for the purposes of a more detailed comparison of defence expenditure and outcomes. The selection of countries was made with regard to both quantitative and qualitative indicators, in particular the membership of NATO, size of a country and of its armed forces, economic indicators, defence policy and strategic culture. Countries are divided into a reference group of Central and Eastern Europe countries with a similar baseline position (Czech Republic, Hungary and Lithuania, collectively "C3", Central European members) and an extended group of selected Allies representing a higher ambition for Slovakia (Denmark, Belgium and the Netherlands, collectively "F3", the founding members).

Poland was omitted from the traditional referencing for Slovakia because of the size of the country and its armed forces, which put Poland in the category of regional powers. This review also includes in the comparison certain small countries which, because of the size of their armed forces, have a limited scope of available capabilities and similar pledges to NATO. The diversity of the selection at the same time allows comparison with countries with a different strategic culture and approach to the implementation of defence policy. The founding group is characterized by a more advanced and ambitious strategic culture, an expeditionary nature of armed forces and deployment of troops in combat operations. For more details concerning the reference groups' members refer to Annex 1.

Table 4: Selected reference country indicators (2019)

	Population (million)	Area (thousands of km ²)	Number of soldiers (thousand)*	Number of soldiers in operations**	Defence expenditure 2019 (EUR million)*	Defence expenditure 2019 (% of GDP)*	Defence expenditure as a share of general government expenditure 2018 (%)**
Slovakia	5.5	49	11.7	255	1,754	1.74	2.92
Czech Republic	10.6	79	25.0	369	2,512	1.19	2.78
C3							
Hungary	9.8	93	19.7	807	1,739	1.21	2.46
Lithuania	2.8	65	15.7	N/A	957	2.03	5.82
F3							
Denmark	5.8	43	18.0	N/A	4,333	1.32	2.55
Belgium	11.5	31	25.9	1,450	4,494	0.93	1.75
Netherlands	17.3	42	41.7	1,000	11,414	1.36	2.87

* NATO estimate, ** EDA estimate 2017, *** Eurostat and NATO data, NLD is an estimate

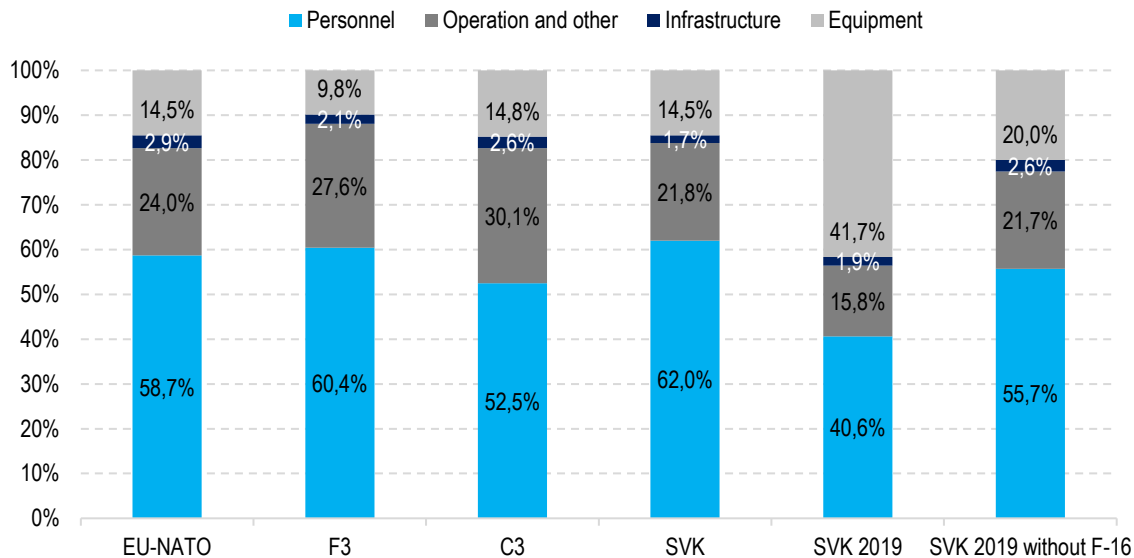
Source: Eurostat, NATO 2019f, EDA 2018, VfMD

The percentage of equipment expenditure in 2012 to 2018, i.e. 15% was comparable to the C3 group. The proportion of equipment expenditure was rising gradually. The percentage exceeded that of the EU-NATO countries in 2017 and reached the level of C3 in 2018. Between 2012 and 2018, the proportion of Slovakia's arms spending increased by 12.7 percentage points. NATO's standard is expenditure on major equipment of at least 20% of total defence expenditure, and this is established across the Alliance as a form of a political commitment.⁶ Maintaining this minimum level of capital expenditure over extended periods allows continuous modernisation and replacement of military equipment in times of peace. No uniform standards apply to the other categories of defence expenditure and such spending is a matter of national discretion.

Since 2019, equipment spending has increased substantially, in particular because of the purchase of F-16 fighters, and exceeded all reference groups' expenditure as well as NATO standards. The proportion of equipment expenditure in total defence spending was nearly triple the average of the C3 countries and EU-NATO countries, and quadruple that of the founding reference group, for 2012 - 2018.

With a percentage of equipment expenditure substantially higher than the long-term average, the structure of 2019 expenditure was commensurate to the need to upgrade the equipment of the AFSR, while in the MOD's view it failed to sufficiently provide for the operation of the equipment (MOD, 2019aj).

Graph 2: Breakdown of defence expenditure of selected NATO members, averages for 2012-2018, 2019



Note: 2019 is an estimate

Source: NATO, 2019fg. VfMD calculations

In the years 2012 - 2018, the personnel expenditure of Slovakia was higher than that of all the reference groups. Slovakia's personnel expenditure was markedly (by 9.5 percentage points) higher than the average of the Central European three, but only slightly higher when compared to the EU-NATO countries' average and the F3's average.

Below-average categories of expenditure included operation, training of the Armed Forces and infrastructure. Slovakia's proportion of operating expenditure reached only 73% of that of the C3 countries, 79% of the F3 countries and 91% of the EU-NATO countries. Expenditure on infrastructure was 41% lower (-1.2 percentage points) than the EU-NATO, 35% than the Central European group (C3) and 20% than the three founder

⁶ The initial political commitment made at the Wales conference in 2014 was re-endorsed at the Warsaw and Brussels summits in 2016 and 2018, respectively, and at the NATO Leaders Meeting in London in November 2019.

countries (F3). Except for 2015 and 2016, the proportion of this expenditure kept decreasing over time. Both the two categories also remained below the average in 2019.

Box 2: Expenditure adjusted for spending on the F-16 aircraft

Adjustment is an analytical technique allowing the comparison of observed events net of seasonal or shock deviations. In 2019, instalments paid for the F-16 fighters made 16.27% of the MOD budget expenditure and this meant a shock change in the expenditure structure. When adjusted for the impact of the F-16 aircraft, with the nominal amounts and structure of the other expenditure unchanged, the resulting budget structure of the MOD for this year allows a better comparison with previous trends.

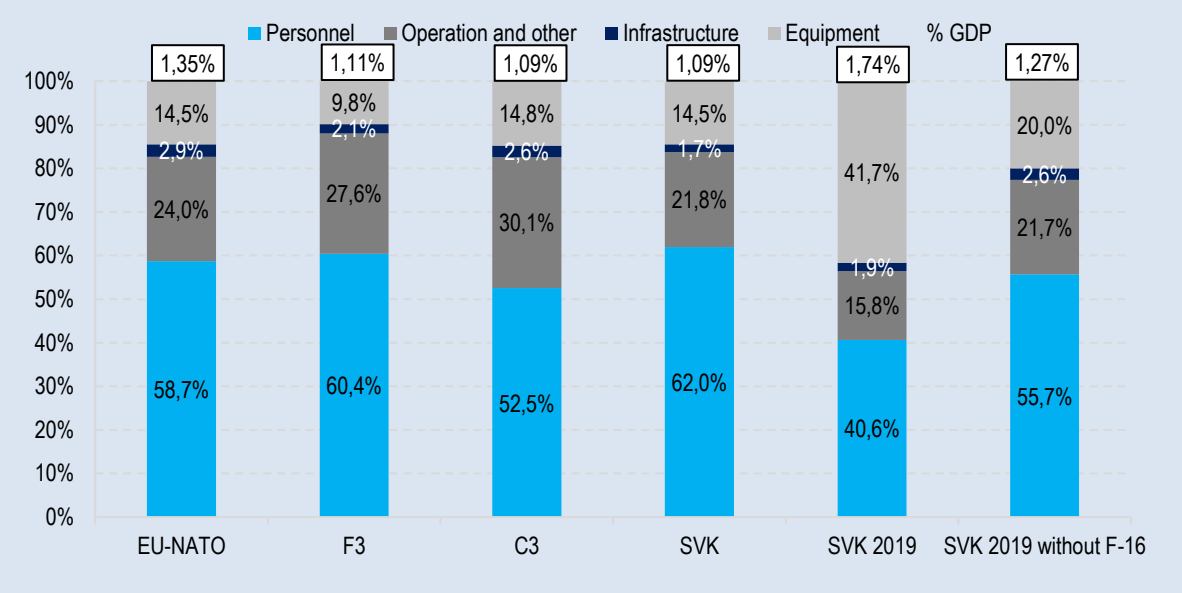
Equipment expenditure was the major contributor to the increase in total defence expenditure in 2019 (71% of the increase on the average for 2012 - 2018). Nearly one fifth (18%) of the increase was due to higher personnel expenditure. Expenditure on operation and infrastructure made up only a minimal proportion of the increase (only 9% and 2%, respectively). The increases in operating expenditure (21%) and infrastructure expenditure (5%) are lower than the other categories, this even when adjusted for the spending on the F-16 aircraft. The adjusted proportion of equipment expenditure decreased to 32%; the highest growth was that of personnel expenditure (42% of the increase).

Even when adjusted for the F-16 fighters, expenditure on equipment exceeded the long-lasting level of the reference groups and reached the NATO-recommended 20% share. This indicates that the Ministry's priority was investment in not only the fighters but other equipment as well.

In the adjusted scenario, infrastructure expenditure reached the level of the reference groups. In a non-adjusted scenario, the deviation due to the purchase of fighters suggests a negligible growth by only 0.2 percentage points. Nevertheless, even when adjusted for the impact of the purchase of fighters, the expenditure increase is insufficient relative to the condition of the AFSR's infrastructure (as presented in the Investments chapter).

Stagnating at a sub-standard level for a long time, adjusted operating expenditure remained about the same, which indicates that increasing it was not among the Ministry's budgetary priorities.

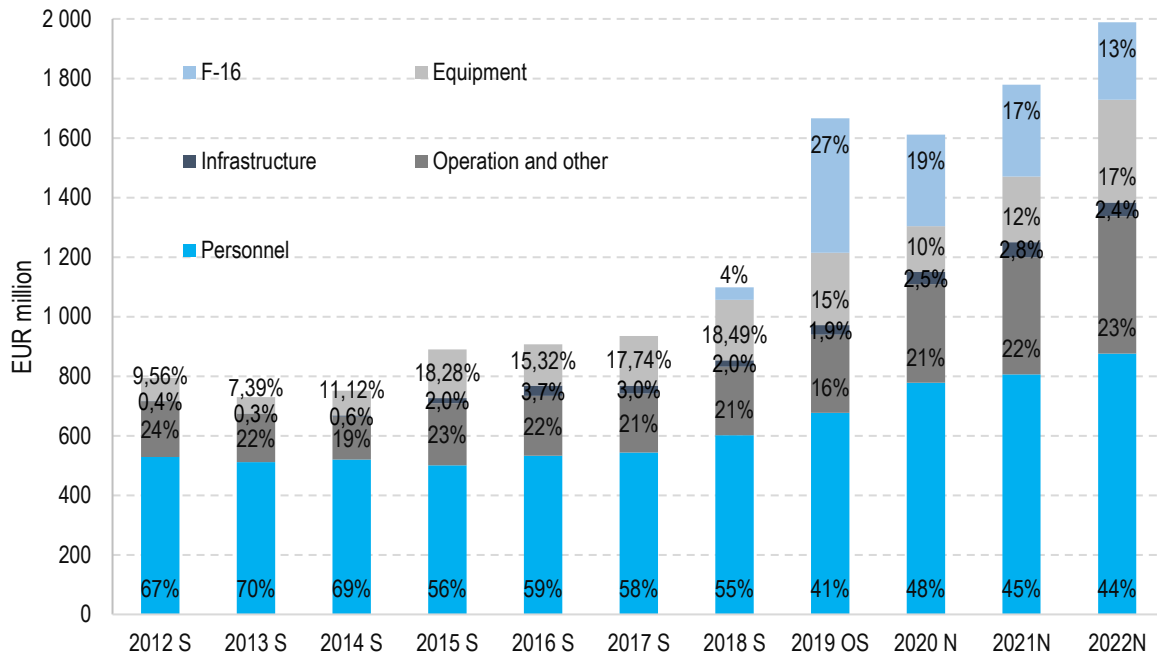
Graph 3: Breakdown of adjusted defence expenditure, and defence as a share of GDP; averages for 2012-2018 and 2019



Note: 2019 is an estimate

Source: NATO, 2019fg. VfMD calculations

Graph 4: Breakdown of Slovakia's defence expenditure for 2012-22, NATO methodology (with F-16 fighters excluded from equipment)



Note: S = Actual; OS = Expected; N = Draft Budget; current prices; years 2019-22 are estimated

Source: NATO, 2019fg; BIS; VfMD

Slovakia's defence personnel expenditure makes up a high proportion of its total defence expenditure. This may hamper the development of equipment, infrastructure and training (considered as operating costs). The Alliance alone warns against an excessively high proportion of personnel expenditure (NATO, 2018d). The Czech Republic, as an example, has set an upper limit on personnel expenditure of 50% of total defence expenditure (MD CR, 2019). This review recommends structuring defence expenditure in the general government budget in accordance with the NATO methodology and including an international comparison of professional soldiers' pay levels (Employment and compensations Chapter), including trends for previous years and a projection for upcoming years.

Box 3: Expenditures as input indicators for defence

The relative amount and structure of defence financing are internationally benchmarked input indicators. Key indicators include defence expenditure as a share of GDP, the proportion of major equipment and related research and development in total defence expenditure and the proportion of R&D in defence expenditure.

In addition to the pledge to spend at least 2% of GDP on defence, further NATO pledges include spending at least 20% of defence expenditure on equipment upgrade and 2% of defence expenditure on defence R&D. Slovakia has met the defence investment pledge in the recent two years, with the proportion of capital expenditure substantially exceeding those of the reference groups in 2019. During the period 2012-2018, Slovakia's defence budget allocations to modernisation were markedly higher than the founding group, and comparable to the EU-NATO members and the Central European group. Investment in defence R&D has for long been below the pledge and significantly lower than all reference groups.

In order to improve the feasibility of defence plans and outcomes, this review recommends ensuring a stable and foreseeable budgeting framework for defence and modernisation of priority capabilities. According to the NATO review, the Slovak Republic should make substantially higher defence investments, align its priorities with the targets set and improve its defence management, defence planning in particular (NATO, 2018c).

Table 5: Input indicators for defence

Indicator	SK/ benchmark	Target	2012	2013	2014	2015	2016	2017	2018	2019*
Defence expenditure as a share of GDP (%)	SK	≥2	1.09	0.98	0.99	1.12	1.12	1.10	1.22	1.74
	EU-NATO	≥2	1.3	1.30	1.29	1.33	1.35	1.39	1.48	1.63
	C3	≥2	0.95	0.91	0.90	1.03	1.15	1.27	1.42	1.48
	F3	≥2	1.21	1.13	1.09	1.06	1.07	1.06	1.14	1.20
Major equipment and related R&D as a share of defence expenditure (%)	SK	≥20	9.56	7.39	11.12	18.28	15.32	17.74	22.27	41.68
	EU-NATO	≥20	11.94	11.59	11.83	14.35	15.08	17.24	19.27	22.86
	C3	≥20	10.61	9.94	9.45	14.35	16.71	19.50	22.83	22.65
	F3	≥20	8.67	8.89	8.39	8.70	10.85	10.55	12.73	17.27
R&D as a share of defence expenditure*** (%)	SK	≥2	0.64	0.46	0.28	0.16	0.15	0.04	0.00*	
	EU-NATO	≥2	0.98	0.89	0.98	0.95	0.86	0.87	0.93*	
	C2>	≥2	0.47	0.49	0.50	0.50	0.46	0.48	0.50*	
	F3	≥2	0.54	0.35	0.35	0.35	0.31	0.31	0.29*	

Note: Constant prices 2015; *NATO estimate; **without Lithuania; ***for some years, data was not provided by all EU-NATO nations

Source: NATO, 2019bfg, VfMD

Box 4: Reporting defence expenditure to NATO

In order to support international comparability of expenditure, the review uses the NATO defence expenditure reporting methodology. The difference against the values resulting from the application of other methodologies varies across years, depending on the expenditure structure: changes may occur in items which a particular methodology does not consider to be defence-related. A more detailed description is provided in Annex 2 (Different defence expenditure calculation methodologies).

Table 6: Slovakia's defence expenditure as a percentage of GDP by methodology

Methodology	2012	2013	2014	2015	2016	2017	2018
NATO	1.09%	0.98%	0.99%	1.12%	1.12%	1.10%	1.22%
COFOG	0.90%	0.90%	1.00%	0.90%	0.80%	1.00%	
EDA	1.09%	0.98%	0.98%	1.13%	1.12%	1.17%	

Source: NATO, 2019fg; Eurostat 2019c, EDA 2018; VfMD

Besides increased spending, reporting the existing defence expenditure thoroughly would also contribute to meeting the NATO pledge (spending 2% of GDP on defence in 2024). **In 2016 - 2019, the amounts of expenditure reported to NATO could have been higher by EUR 24 million (0.03% of GDP) per year on average.**

Table 7: Defence expenditures in EUR million (% of GDP)

	2016	2017	2018	2019
NATO (EUR million)	907	935	1,098	1,609*
(% of GDP)	1.12%	1.11%	1.22%	1.71%
Possible additional expenditure amounts to be included in reporting (EUR million)	24	24	24	26
(% of GDP)	0.03%	0.03%	0.03%	0.03%
<i>of which (EUR million):</i>				
(1) Old-age pensions of civilian personnel	15	15	15	15
(2) Difference: General Ledger - NATO expenditure	7	7	7	9
(3) COFOG defence (net of NATO expenditure)	2	2	1	2
Expenditure including additional amounts (EUR million)	931	959	1,122	1,635
% of GDP	1.15%	1.13%	1.25%	1.74%

Source: Processed by VfMD based on BIS BI data and the MOD reports to NATO *update according to RIS BI

The estimated annual amount of old-age pensions of the MOD's civilian personnel is EUR 15 million. According to the NATO methodology, old-age pensions of the MOD's civilian personnel should be included in defence expenditure. Such expenditure amounts annually to around EUR 15 million.⁷

Slovakia did not report to NATO all expenditure treated as defence-relevant by the methodology. This regards EUR 7 million recorded in the general ledger of the general government budget under the *Economic Mobilisation and State Defence Support* inter-ministerial programmes, which are budgeted outside the MOD chapter. Nearly one half of the non-reported expenditure is budgeted within the chapter of the Ministry of Economy of the Slovak Republic (MEco SR) and the rest is divided across 13 Chapters.

Considering the COFOG classification, EUR 2 million per year on average was not reported to NATO as defence expenditure in the years 2016 - 2018. However, over 75% of that expenditure falls under the *Civil Defence* header of the chapter of the Ministry of Interior of the SR (MI SR).

Table 8: COFOG defence expenditure not included in NATO reporting, EUR million

Programmes		2016	2017	2018
Effective and Reliable General Government	MI SR	1.77	1.54	0.89
Policy Making and Implementation	MTC SR	0.17	0.23	0.30
Development Cooperation	MI SR	0.11	0.12	0.10
Implementation of WHO IHR	MH SR	0.15	0.09	0.02
Total		2.22	2.02	1.33

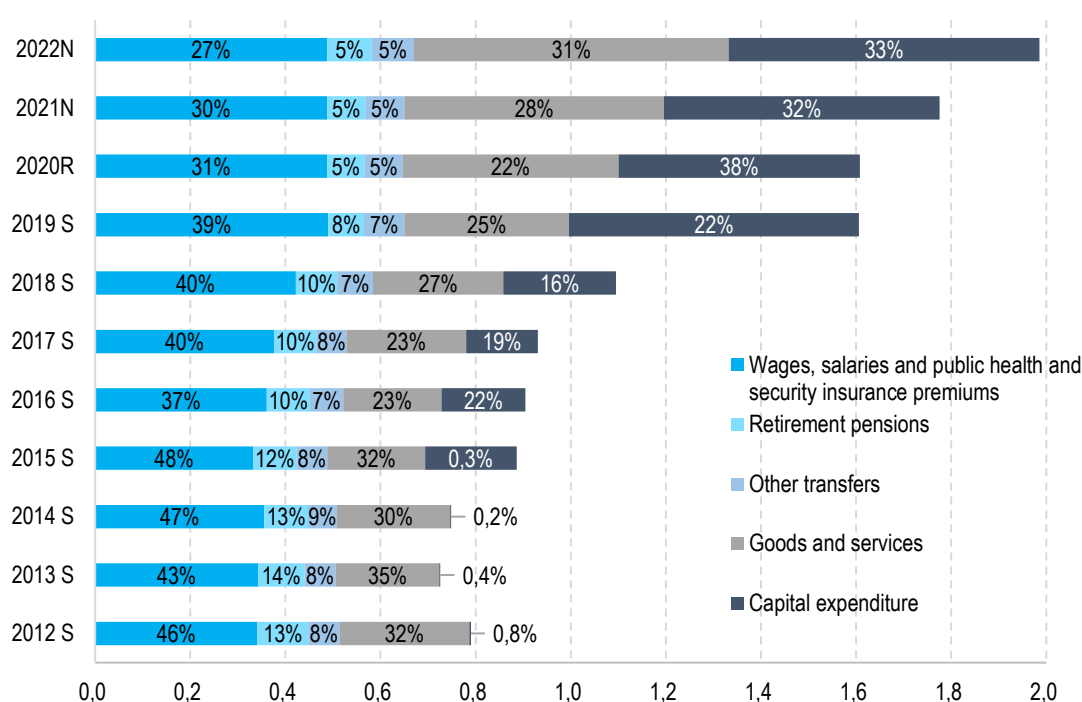
Source: BIS BI

1.2. Budget of the Ministry of Defence of the Slovak Republic

The expenditure of the Ministry of Defence of the Slovak Republic of 2019 amounted to EUR 1.61 billion; defence expenditure of other chapters of the state budget amounted to EUR 11.8, which was incurred under the *Economic Mobilisation, State Defence Support* and *Secondment of Civilian Experts to Crisis Management Operations outside the Territory of the SR* inter-ministerial programmes (Table 13). According to the approved draft general government budget, the Ministry of Defence's budget is expected to rise rapidly in the upcoming two years, to EUR 1.78 billion and EUR 1.99 billion in 2021 and 2022, respectively. The expected actual figures of 2020 were EUR 24 million higher than the approved budget in April, amounting to EUR 1.63 billion.

⁷ Based on the assumptions that 150 civilian employees (2.5% of all civilian personnel) retire annually and that they take old-age pension for 20 years (approx. 3000 persons receive old-age pension at present). The average old-age pension in the Slovak economy was EUR 435 in 2019.

Graph 5: MOD expenditure breakdown according to ECBT (EUR billion)



Note: S = Actual; R = Approved Budget; N = Draft Budget

Source: BIS. Analysis: VfMD

The two major programmes of the Ministry of Defence of 2019 accounted for 99.7% of expenditure and three fifths of the spending was operating costs. The Defence programme has for long been the Ministry's largest programme under which expenditure on the operation of the Ministry, the Armed Forces and personnel remuneration is budgeted. The scope of the Defence Development programme covers primarily capital expenditure and it accounted for 96.4% of the Ministry's investment spending in 2019.

Table 9: Breakdown of MOD expenditure by purpose as percentage of total MOD expenditure (2019)

	600 Current expenditure	700 Capital expenditure	Total
Defence	54.31%	1.33%	55.65%
Defence Development	7.46%	36.60%	44.06%
Economic Mobilisation	0.20%	0.00%	0.20%
Secondment of Civilian Experts	0.03%	0.05%	0.08%
State Defence Support	0.01%	0.00%	0.01%
Development Cooperation	0.002%	0.000%	0.002%
Total	62.02%	37.98%	100.00%

Source: BIS; VfMD

The MOD chapter covers nine budgetary organisations and two subsidiary organisations. The major ones are the *Lešť* Special Healthcare and Training Institute and the *M.R. Štefánik* Armed Forces Academy in *Liptovský Mikuláš*. Their expenditure funded from the state budget in 2019 amounted to 79% of the expenditure of the MOD's subordinated organisations.

Table 10: Overview of the MOD's subordinated organisations (2018) (in EUR million)

Budgetary organisations	Headcount	State budget	Other sources of funding	Total expenditure
Special Healthcare and Training Institute in <i>Lešť</i>	361	53.74		53.74
<i>M.R. Štefánik</i> Armed Forces Academy	582	15.39	0.04	15.43
<i>DUKLA Banská Bystrica</i> , Military Sports Centre	175	6.09		6.09
Military Technical and Testing Institute <i>Záhorie</i>	136	3.52		3.52
Military Office of Social Security	48	2.68		2.68

Institute of Military History	69	2.37		2.37
Defence Standardisation, Codification and State Quality Assurance Authority	32	1.06		1.06
Ordinariate of the AF and Armed Corps of the Slovak Republic	14	0.45		0.45
Ecumenical Pastoral Service Centre	7	0.25		0.25
Subsidiary organisations				
SNP Central Military Hospital (Faculty Hospital) in <i>Ružomberok</i>	1,541	1.67	21.08	22.75
Housing Agency of the Ministry of Defence	53		3.54	3.54
Total		87.22	24.66	111.88

Source: BIS, CMH 2019, VfMD

The annual amount of the Ministry of Defence's budget spent on the army's sports activities is EUR 6 million. This and the financing of the police's sports activities from the Ministry of Interior budget are specific sports financing arrangements based on the Sports Act. The key goal of the *DUKLA* Military Sports Club is to support the representation of the nation in certain sports disciplines. The efficiency criterion is the number of medals won at top world and European sports events. The army's own training centre also provides specific services to other constituents of the AFSR, such as the selection and training of special forces, or high-performance military training camps. The categorisation of athletes into pay classes is based on sports achievements in accordance with the relevant Government Decree. The categorisation into a class is normally reviewed every two years. In 2018, the Club met the measurable indicators set: the military athletes won 33 medals, more than the 27 planned (MOD. 2018c).

Enterprises owned by the MOD hold assets with a book value of EUR 165 million. The Ministry owns three joint stock companies ("a.s.") and one state-run enterprise ("š.p."). In 2018, the largest enterprise was the Military Forestry and Asset Management enterprise (*Vojenské lesy a majetky SR, š.p.*) with equity worth EUR 71 million and the Aircraft Repair enterprise (*Letecké opravovne Trenčín, a.s.*) with equity of EUR 50 million.

Table 11: Overview of economic results of the government-owned enterprises (in EUR million)

Entity	2017	2018	2017	2018	2019	2020	2021	2022
	P/L actual		Profitability		P/L plan			
<i>Vojenské lesy a majetky SR, š.p.</i>	0.18	0.25	0.25%	0.35%	0.05	0.08	0.08	0.08
<i>Letecké opravovne Trenčín, a.s.</i>	0.32	0.01	0.63%	0.02%	0.64	2.43	2.71	2.75
DMD Group, a.s.	-0.93	-1.17	-3.64%	-4.61%	0.00	0.06	0.06	0.06
HOREZZA, a.s.	-0.60	0.31	-3.38%	1.72%	0.13	0.16	0.16	0.19

Note: P/L = profit/loss

Source: GGB 2020 – 2022; VfMD

The profits of the state-owned enterprises are low relative to the values of their assets, but making profit is not necessarily their primary purpose.⁸ Nevertheless, those entities should not generate loss over long periods. Three of the MOD's enterprises generated profits in 2018 and all of them are supposed to achieve profitability in next years. For the Aircraft Repair and DMD GROUP entities, the attainment of this goal is questionable. Their performance history suggest that they will generate a loss or much lower profit.

In addition to the entities mentioned above, the Ministry of Defence also holds a half of shares in *Nemocnica svätého Michala, a.s.*, the entity owning and running a hospital founded under the Ministry of Interior's authority. Since 2014, the MOD offered the Aircraft Repair business, including its personnel and assets, to MSM Martin (VOPTN, 2013) for a long-term lease.

⁸ The primary purpose of state-owned enterprises is providing services of public interest. For entities engaging in defence production and repair, another reason for their state ownership is the fact that they would become legitimate military targets in case of war.

Box 5: No-Policy-Change Scenario for MOD expenditure

The no-policy-change scenario is an analytical approach used to figure out the amount of future expenditure if no additional measures are implemented. Savings/additional expenditure foreseen in this review will be projected against the non-policy-change scenario.

The basis of the expenditure scenario for the MOD for 2020-2023 is the actual expenditure of the MOD of 2019, and the 2015 -2019 average of capital expenditure.

Employee compensation expenditure⁹ for 2020 is estimated on the basis of the assumed impact of the soldiers' pay increase effective from 1 February 2020. The growth for subsequent years is expected to amount to the predicted wage growth rate in the economy (preservation of labour market competitiveness).

Expenditure on goods and services is indexed using the expected CPI and expenditure on current transfers, except the special account subsidy, is indexed by the expected wage growth rate and CPI on an equal-weight basis. In the no-policy-change scenario, the special account subsidy is taken from the 2020-2022 budgets and for 2023, from supporting documents provided by the MOD.

The basis of capital expenditure is the average of expenditure for the years 2015-2019 at 2019 prices. For next years, expenditure is indexed by the expected GDP growth rate, adjusted for tax revenue elasticity.

In 2018-2019, the Ministry of Defence financed only a minimum of its expenditure (less than EUR 100,000) from the EU Funds and no such funding is budgeted for the years 2020-2022; accordingly, the scenario disregards such expenditure.

The no-policy-change scenario does not include MOD expenditure financed from the organisations' own funds. This includes in particular the expenditure of own funds of the Central Military Hospital in Ružomberok and the Housing Agency of the Ministry of Defence.

The no-policy-change scenario supposes expenditure to reach EUR 1.4 billion in 2021, while the budgeted expenditure is EUR 1.77 billion. The difference is attributable to capital expenditure and goods and services.

Table 12: No-policy-change scenario for MOD policies

	2018	2019	2020	2020	2021	2021	2022	2022	2023
	A	A	NPC	B/A	NPC	GGB	NPC	GGB	NPC
Total current expenditure	847	989	1,084	1,095	1,113	1,190	1,166	1,326	1,198
Employee compensations	487	563	647	574	673	575	705	581	740
Goods and services without compensations	253	329	335	421	335	513	342	630	349
Pension account contributions	87	75	79	79	81	81	94	94	84
Other current transfers	20	22	24	21	24	21	25	22	26
Capital expenditure	237	610	265	508	280	579	293	653	306
Total	1,085	1,599	1,349	1,603	1,393	1,769	1,459	1,979	1,503
% of GDP	1.2%	1.7%	1.5%	1.8%	1.5%	1.9%	1.5%	2.0%	1.4%

Note: A – Actual, NPC – No-Policy-Change Scenario, GGB – General Government Budget

Source: MOD; VfMD calculations

Inter-ministerial defence programmes

According to the programme structure, the Ministry of Defence's expenditure made up over 99% of all defence expenditure of Slovakia in 2019. The Economic Mobilisation programme as the largest inter-ministerial programme accounted for only 0.5% of the defence spending of the MOD. The purpose of inter-ministerial programmes is to serve the country's defence needs in cross-cutting areas controlled by other Ministries.

⁹ According to ESA 2010; for more details see Annex 6.

Table 13: Programme structure of defence expenditure in 2019 (in EUR million)

	Development Cooperation*	State Defence Support	Economic Mobilisation	Defence Development	Defence	Secondment of Civilian Experts	Total
MOD	0.03	1.30	3.23	707.76	893.89	0.09	1,606.32
MEco SR			4.51				4.51
ASMR SR		2.12	0.60				2.72
MTaC SR		0.79	1.66				2.45
MH SR		0.22	1.45				1.67
MI SR		0.10	0.04				0.14
MoF SR			0.01			0.04	0.04
MEnv SR			0.16				0.16
MARD SR			0.09				0.09
MLSAF SR			0.05				0.05
GCCA SR			0.001				0.001
NRA SR			0.0004				0.0004
Total	0.03	4.53	11.80	707.76	893.89	0.13	1,618.15

* According to the general ledger of GGB, only expenditure of the MOD is recognized as defence expenditure for this programme.

Source: BIS; VfMD

2. Objectives and Outcomes in Defence

- The objective of defence is to protect the security of Slovakia and its Allies, deploy armed forces on international operations and assist in domestic crisis management.¹⁰
- The fulfilment of objectives and outcomes in defence is impossible to assess in detail in a public document. The performance of military units at both the domestic and NATO level is subject to classification. They are not subject to regular public assessments either. Only partial information was disclosed to the Ministry of Finance.
- Publicly available information indicates that Slovakia is failing to deliver on its commitments to NATO. The Armed Forces of the Slovak Republic provide NATO with only 80% of the requested units and their quality is sub-standard (39%).
- Domestic assessments from 2019 point at insufficient and worsening operational readiness, particularly in land-force combat units.¹¹
- Deployability and sustainability targets for international operations have been achieved by the land forces, but not the air force.
- According to the NATO staff assessment, Slovakia's defence plans are not well aligned with NATO priorities. The land-force brigade that is intended to be Slovakia's key contribution to collective defence remains unfinished.

Table 14: Measures covering Objectives and Outcomes in Defence

	Measure	Responsibility	Deadline
20	Perform defence spending reviews as an input for the adoption of new Capability Targets	Government of the SR, MOD SR, MoF SR	31 Dec 2024
22	Implement a methodology for the regular, objective and measurable evaluation of performance against Capability Targets	MOD SR	continuously
23	Prepare a methodology to assess operational readiness for conducting national defence tasks and international commitments	GS AFSR, MOD SR	31 Dec 2020
24	Publish Comprehensive Defence Assessments of the Slovak Republic, including reporting on the fulfilment of Capability Targets	MOD SR	annually
25	Publish the Overview of NATO's Defence Planning Capability Reviews of Slovakia	MOD SR	within 30 days of approval by NATO Defence Ministers
26	Define publishable indicators of operational readiness for conducting the key tasks of the AFSR defined by the Defence Strategy of the Slovak Republic	GS AFSR, MOD SR	31 Dec 2020
27	Revise the comprehensive methodology for defence planning	MOD SR	31 Dec 2023
33	Align the programme structure of the budget and of the Programme Plan of the MOD as well as the corresponding key outcome indicators with the recommendations of this spending review	MOD SR, MoF SR	31 Mar 2021

Source: VfMD

The key objective of defence is protecting the security of Slovakia and its Allies with the use of its own armed forces and the means of collective defence. Furthermore, the objective of defence is to contribute to peace, stability and security outside the territory of the Slovak Republic through the deployment of

¹⁰ The terms 'objective' and 'task' may be used interchangeably in this review. A more detailed definition of tasks is provided below.

¹¹ GO SR, 2019; MOD, 2019b.

armed forces in operations and missions outside national territory and to support public authorities in domestic crisis management.¹² The Slovak Republic carries out these objectives both individually and collectively through NATO and EU defence cooperation. Defence objectives are specified in greater detail in the Defence Strategy of the Slovak Republic.

Box 6: Tasks of the AFSR as defined by the Defence Strategy

The political-military ambition of the Slovak Republic determines basic parameters for the implementation of the key defence policy goals. The 2017 Defence Strategy defines the political-military ambition of the Slovak Republic as the readiness of the AFSR to conduct the following tasks:

- a) **Effectively ensure the defence of the Slovak Republic, individually or collectively with NATO and EU members;** increase assets and capabilities through mobilisation and supply of goods and services to face imminent threat or armed attack; continuously maintain assets and capabilities in order to prevent and deter armed attack by a potential enemy; and to increase them as a function of threats and risks;
- b) **Provide help to NATO and EU member nations using assets and capabilities based on a land force brigade, eventually a heavy land force brigade;**
- c) **Contribute to peace, stability and security outside the territory of the Slovak Republic,** usually led by international organisations in conformity with international law, through **long-term contributions up to:**
 - 1. **one battalion group** of land forces or equivalent of other forces; or
 - 2. **one battalion and one company** of land forces or equivalent;
- d) **Assist in the management of emergency situations** and non-military crisis situations, including assistance with certain tasks of the Police Force;
- e) **Ensure the inviolability of airspace** within the framework of the NATO Integrated Air and Missile Defence System;
- f) **Provide host-country support** to foreign armed forces;
- g) **Contribute to rapid reaction forces** of NATO and the EU;
- h) **Contribute to the reinforced forward presence** on NATO territory and to humanitarian aid;
- i) Carry out international military cooperation including training;
- j) Allocate military personnel to the structures and military commands of NATO and the EU.¹³

This political-military ambition is implemented also by the Military Police and Military Intelligence which are not a part of the AFSR.

The outcome indicators measuring defence performance include the fulfilment of Capability Targets, operational readiness and deployment in international operations. This spending review proposes three sets

¹² The wording reflects the Defence Strategy of the Slovak Republic adopted and implemented by the Government since 2017, and the Defence Strategy of the Slovak Republic adopted by the Government and the National Council of the SR in 2005 in accordance with law. "The basic goal of the defence policy of the Slovak Republic is to defend the state sovereignty, territorial integrity and inviolability of borders as an inevitable precondition for the protection of security of the state and its citizens. (...) It provides defence individually, relying on its own forces, or using the defence potential of the collective defence of NATO member countries, which is considered the most effective model of defence. (...) The main role and purpose of the AF SR is to ensure the defence of the Slovak Republic, assist a NATO member in case of an armed attack, and provide assistance and support to a member of the EU in case or armed aggression. (...) The AFSR also carry out tasks outside the territory of the Slovak Republic and other tasks arising from the laws of the Slovak Republic and international law." MOD, 2017a, Articles 6, 8, 9, 29, 52 and 53

"The basic objective of the defence policy of the Slovak Republic is to ensure the security of its citizens and to guarantee defence of the state, with reliance on its own forces and the possibility of collective defence, to take an active part in promoting peace and stability in the world, preventing conflicts and settling crisis situations in accordance with international law and confidence building measures. (...) The initial primary duty of the Armed Forces of the Slovak Republic to defend the state territory shall be extended to include, in addition to the defence of the Slovak Republic, the commitment to contribute to the defence of its Allies and to jointly prevent conflicts and settle crisis situations in the world. Based on the decision of the state political leadership, the Armed Forces shall fulfil strategic tasks, tasks resulting from the adopted international commitments, and auxiliary tasks in support of civil authorities." MOD, 2005, Articles 9 and 28

¹³ For the full text of the SR's political-military ambition refer to MOD, 2017a.

of performance indicators providing different levels of detail, partially overlapping in the assessment of targets and differing in the degree of allowable disclosure.

The key outcome indicator is the fulfilment of Capability Targets that Slovakia adopts together with NATO. These targets cover, in particular, tasks relevant to the defence of the Allies, the defence of national territory using NATO collective defence means, and contributions to international operations. For Slovakia as a small nation, which is not able to ensure its defence by individual means, the Capability Targets essentially determine the structure of its armed forces.

The second indicator is the operational readiness of the AFSR to conduct the key tasks defined by the Defence Strategy. The Capability Targets do not fully cover all defence objectives. They do not address requirements arising from a country's individual defence or domestic crisis management; these, however, need to be accounted for as part of assessing defence performance. Operational readiness reporting is more detailed, assessing military units in terms of personnel, major equipment, training and stocks.

The third set of indicators covers the deployment of troops on international operations. It is the single indicator measuring Slovakia's willingness and ability to use its defence potential.

Table 15: Key defence objectives and indicators

Key objectives ↓ Indicators →	Fulfilment of Capability Targets	Operational readiness	Deployability/sustainability	Number of deployed troops
1. Defence of the SR and Allies¹				
using own forces ²	Partial	Yes	Partial	Partial
using NATO forces ³	Yes	Yes	No	No
2. Operations and missions	Yes	Yes	Yes	Yes
3. Domestic crisis management	Partial	Yes	Partial	No
Key reporting dimensions	Quantity (number of units) Quality (ability of units)	Quantity (personnel, materiel, training)	Quantity (number of troops/ equipment)	Quantity (number of troops)

Note: Tasks according to the Defence Strategy of the SR: ¹ tasks a, b, e, f, h and j ² tasks a and b ³ task f ⁴ tasks c, g and i ⁵ task d *Source: VfMD*

Slovakia does not fulfil the Capability Targets it has adopted as its contribution to NATO collective defence and does not meet the operational readiness targets as set out in the Defence Strategy. Deployability and sustainability targets for international operations have been achieved by the land forces, but not the air force. Some targets cannot be publicly assessed due to classification.

Table 16: Outcome indicators for defence

Indicator	Source	Benchmark	Target (%)	2015	2016	2017	2018	2019
Fulfilment of Capability Targets^a								
Fulfilment of Capability Targets, quantitative (number of units)	MOD	SK	100					80
Number of unfulfilled categories ^b (% of the total number of categories)	MOD	SK	0					80
Fulfilment of Capability Targets, qualitative (quality of units)	MOD	SK	100					39
Number of unfulfilled categories ^b (% of the total number of categories)	MOD	SK	0					80

Table 16: Outcome indicators for defence

Indicator	Source	Benchmark	Target (%)	2015	2016	2017	2018	2019
Operational readiness								
Defence of national and Allied territory			This review recommends defining and publishing the target					
Operations and missions			This review recommends defining and publishing the target					
Domestic crisis management			This review recommends defining and publishing the target					
Deployment in international operations	Source	Benchmark	Target (%)	2015	2016	2017	2018	2019
Number of troops deployed	EDA	SK	NATO median ^g	2.3	1.9	1.9 ^c		
(% of total military personnel)	EDA	EU-NATO ^f	NATO median ^g	1.4	1.5	1.1 ^c		
	EDA	C2	NATO median ^g	1.7	1.8	1.6 ^c		
	EDA	F2	NATO median ^g	2.3	4.7	3.9 ^c		
Deployable forces, land	NATO	SK	50		52.4	50		
(% of total land forces)	NATO	C3+F3	50		67.4	65.4		
Sustainable forces, land	NATO	SK	10		12.1	11.7		
(% of total land forces)	NATO	C3+F3	10		11.1	10.8		
Deployable forces, air	NATO	SK	40		10	5.7		
(% of air force platforms)	NATO	C3+F3	40		78.6	55.8		
Sustainable forces, air	NATO	SK	8		0	0		
(% of air force platforms)	NATO	C3+F3	8		14.3	9.2		

Note: ^a The evaluation of Capability Targets expresses the proportion of the number of requirements as % of the total number of requirements defined in the 2017 Capability Targets ^b Only targets under MOD responsibility, without the MFEA SR and MI SR ^c estimate by the source ^d C3 without Lithuania, F3 without Denmark ^e Air forces of C3 in 2016 without Hungary ^f Data of several EDA members for certain years are incomplete ^g Data is non-public ^h 2017 Capability Targets divided into five categories: land forces, air forces, special operations forces, enabling forces, stabilisation and reconstruction Source: MOD, 2019g; EDA, 2017; NATO, 2018e; VfMD

Fulfilment of Capability Targets

The Capability Targets adopted by Slovakia as a contribution to NATO's collective defence, in particular the commitment to provide an infantry brigade, have for long been undelivered in terms of quantity, quality and time (MFEA SR, 2018; NATO, 2018c; NATO, 2020a). According to the NATO staff assessment, Slovakia's defence plans are insufficiently aligned with the Alliance's priorities (NATO, 2020a).

Slovakia adopted 90 Capability Targets in 2017, which are broken down into land forces, air forces, enabling forces, special operations forces and post-conflict stabilisation and reconstruction (contribution to the recovery of crisis regions).¹⁴ Performance against the targets is reviewed by NATO staff on a two-year basis. The reviews involve a quantitative part covering the required numbers and types of capability (e.g. brigade, battalion group, air-policing aircraft) and a qualitative part assessing capabilities against the requested standard (e.g. firepower, mobility, force protection, operating in cold or extreme hot weather conditions). The NATO assessment examines compliance with the requested parameters (requirements) rather than reporting on the number of Capability Targets that are fulfilled.¹⁵

¹⁴ The Capability Targets cover most of the units of the AFSR and also include inter-ministerial tasks involving the responsibility of other authorities, the National Security Office, MFEA SR and MI SR in particular, in addition to that of the MOD.

¹⁵ The scope of the main tasks for which every military unit is trained depending on its **operational designation** are detailed in **capability requirements**, which are grouped into **Capability Targets**. The requirements included in the Capability Targets and evaluated by NATO cover various aspects of development: doctrine; organization; equipment, materiel and communication and information systems; training; leadership and personnel; infrastructure and interoperability (DOTMLPFI). This approach means that equipping and manning a unit is not enough; a ready unit must also meet qualitative parameters.

The AFSR provide 80% of the units requested by the Alliance, but their quality is sub-standard (39%, Table 17). Out of the five Capability Target categories, Slovakia has met requirements only in post-conflict stabilisation and reconstruction.

Table 17: Fulfilment of 2017 Capability Targets (2019)

Indicator	Target (%)	Quantitative Targets	Qualitative Targets
Fulfilment of Capability Targets – overall	100	80	39
Land forces	100	0	23
Air forces	100	25	45
Special operations forces	100	50	0
Enabling forces	100	94	51
Post-conflict stabilisation and reconstruction*	100	100	100

*Note: The evaluation reflects the number of requirements met out of the total number of requirements of the 2017 Capability Targets. * Assessment of targets falling under the responsibility of MFEA SR and MI SR is not available to the MoF SR.*

Source: MOD, 2019g. Calculations: VfMD

The worst-performing military branch are the land forces, while being Slovakia’s key contribution to NATO and the major part of the AFSR. Based on NATO Defence Ministers agreement, the most important commitments for Slovakia include a heavy infantry brigade and a deployable electronic surveillance measures (DESM) capability. The meeting of standards for the heavy infantry brigade, as applicable to collective defence since 2018, is envisaged past 2030, which NATO deems to be an excessively long time (NATO, 2020a). Slovakia should achieve the DESM capability in accordance with its pledge, subject to the planned purchase of equipment as a prerequisite.

Operational readiness

Domestic assessments from 2019 point at insufficient and worsening operational readiness, in particular that of land-force combat units (GO SR, 2019; MOD, 2019b). The readiness of a military unit to meet its designated tasks is assessed on the basis of its manning, equipment including stocks¹⁶, and training (MOD, 2019b). Performance on these targets cannot be publicly assessed for classification reasons. The Netherlands sets a model for disclosing the assessment of targets while protecting legitimate security interests (Box 7). Therefore, this review recommends defining new operational readiness indicators for the AFSR to allow for the assessment of their ability to meet international commitments as well as national tasks to the full extent of the political-military ambition promulgated by the Defence Strategy.

The defence tasks arising from the Defence Strategy are elaborated in greater detail in the operational readiness targets of the AFSR. They are consistent with the Capability Targets, but more detailed. They are based on the indicator of operational readiness of military units. Certain countries of NATO or the EU disclose information on readiness at different levels of detail.

Deployment in international operations

Land forces have achieved the NATO-requested deployability and sustainability targets (50% and 12%, respectively) (NATO, 2018e). Slovakia is able to sustain land forces abroad to an extent comparable to the reference countries; however, it has to exploit the available human resources more intensively since it has fewer forces ready for deployment.

The deployability of the air force is below one fifth of the requirement (6% instead of 40%; NATO, 2018e), and their sustainability in operations is zero. Slovakia’s air force substantially lags behind the air forces of the

¹⁶ The review covers the supplies of ammunition, fuels, medical materiel, outfit materiel, spare parts and foodstuffs.

reference countries. Deployability (the ability to deploy units in the area of operations) and sustainability (the ability to supply and rotate deployed units), combined with the actual number of deployed troops, indicate the usability of the armed forces outside the territory of the Slovak Republic.

As regards the number of deployed troops, Slovakia has for long been more active than the EU-NATO countries, deploying substantially more personnel than the reference countries in some years. Slovakia's contribution to operations in terms of deployed troops is seen as proportional to the size of its armed forces.¹⁷ While there is no internationally accepted target for deployed forces, this review proposes a benchmark corresponding to the percentage of deployed troops of total armed forces personnel calculated as a median of NATO nations, which is in line with NATO's practice (NATO, 2018d), taking into account the incremental costs for operations and missions incurred over and above the forces' usual activities.

In 2017, 1.9% of the AFSR were deployed abroad, compared to 1.1% of the EU-NATO member countries' troops, 1.6% for the Eastern reference group and 3.9% for the Western reference group. Since 2012, the AFSR's contribution to operations has been decreasing, similarly to the Eastern group. The decrease is partially attributable to a change in operational needs associated with the termination of the NATO operation in Afghanistan (2011 – 2014). Since 2016, Slovakia has lagged substantially behind the Western group (Table 16). The number of deployed troops is the only indicator measuring Slovakia's ability and willingness to use its forces in actual practice. Assessing the contribution that deployments make to the quality of the Armed Forces would require consideration of further aspects, such as whether the deployed units are organic, the level of difficulty of the operations and the ability to apply lessons learned across all Armed Forces units. The number of deployed troops should also be complemented by information on the incremental costs of operations and missions according to NATO methodology.

2.1. Defence Performance Reporting

Based on the available sources, the current performance reporting model used by the MOD to assess defence outcomes does not allow reporting on the delivery of the national tasks defined by the Defence Strategy, nor does it enable to quantify the costs associated with the fulfilment of operational readiness targets. It is necessary to implement a methodology for the regular, objective and measurable assessment of the fulfilment of the Capability Targets and readiness targets by the AFSR. It is necessary to verify the method applied by the MOD in its assessment of how the requirements defined by the Capability Targets are fulfilled. The funding of and reporting on the delivery of NATO commitments and the performance against defence development targets were also reviewed by the Supreme Audit Office of the Slovak Republic (SAO SR, 2018a; SAO SR, 2018b; SAO SR, 2018c). The assessment of input and outcome indicators for defence must be clearly incorporated in the defence programming process and in the general government budget.

The new Generic Force Structure (2035) of the AFSR must reflect the EU's capability development requirements. Slovakia's participation in EU investment projects aimed at filling capability shortfalls should be complementary to and harmonized with NATO. The commitments concerning defence investments, capability development and operational readiness (MOD, 2019d), which are legally binding for nations participating in the EU's Permanent Structured Cooperation (PESCO), are either identical to NATO commitments, or cannot be clearly quantified at present. The European Defence Agency (EDA) assesses, inter alia, the proportion of research and technology (R&T) expenditure of total defence expenditure (2% benchmark), participation in collaborative European investment projects (35% of total defence equipment procurement budget), participation in collaborative European

¹⁷ For 2016 – 2018, NATO has assessed the contribution made by the land forces of the AFSR as basically adequate (NATO, 2018a). For 2018 - 2019, the contribution of all constituents of the AFSR has preliminarily been rated as adequate; this is subject to confirmation by updated statistics in April/May 2020 (NATO, 2020a).

R&T research and technology (20% of total defence R&T budget) and participation in PESCO projects (at least one project). While participating in six PESCO projects, Slovakia does not meet the EDA benchmarks (MOD, 2019d). **In order to enable a more precise evaluation of performance against EU capability development requirements, Slovakia's implementation plan should include a greater level of detail.** Ensuring coherence in building national capabilities for use within NATO and the EU in accordance with the agreed commitments is a national responsibility. The complementary fulfilment of commitments arising from the Slovak Republic's participation in PESCO (20 commitments at present) and the NATO Capability Targets should be incorporated in the annually updated national implementation plan (National Implementation Plan of the Slovak Republic's Participation in the EU Permanent Structured Cooperation), which is subject to Government approval.

The assessment of operational readiness does not support reporting on the delivery of national tasks defined by the Defence Strategy, nor does it allow monitoring the operational readiness of heavy infantry brigade units. The documents made available to the MoF SR (MOD, 2019b) do not indicate a clear link between operational readiness targets and all major tasks of the AFSR according to the Defence Strategy. Furthermore, it is impossible to evaluate Slovakia's commitment to individual defence and its mobilisation capability.¹⁸ This review recommends modifying the operational readiness reporting methodology so as to support the monitoring of performance concerning national defence tasks (individual defence including mobilisation; assistance in non-military crises such as pandemics, terrorist attacks or hybrid threats) and international commitments. The assessment of operational readiness could also serve for monitoring the operational readiness of priority units within the Capability Targets (as proposed in Table 18) and for quantifying the costs associated with the Capability Targets.

Table 18: Proposed operational readiness targets and priority units based on the 2017 Capability Targets

		Personnel	Equipment	Training
1.				
2.	Overall operational readiness of the AFSR			
3.				
4.	Heavy Infantry Brigade			
5.	of which:			
6.				
7.				
8.	Passive Electronic Surveillance (DESM)			

Note: *National requirement higher than the NATO minimum military requirement, as defined in MOD, 2019b. ** Measurable indicator defined in MOD, 2019h. *** VfMD estimate based on the categorisation of these forces as lower-readiness forces. Source: MOD, 2019b; MOD, 2019h; NATO, 2017

The evaluation of input and outcome indicators for defence must become a part of the general government budget. This review recommends that the set of measurable indicators of the GGB should include all input indicators (Table 5) and outcome indicators (Table 16) listed in this review. The performance against Capability Targets should be broken down by category of the types of forces (Table 17) and include an overview of performance for previous years. At present, only land force deployability and sustainability indicators are monitored.

The non-disclosure of key documents and data that are publicly accessible in other countries hampers expert debate on defence performance. Defence performance should be disclosed, at least to the extent

¹⁸ Article 3 of the North Atlantic Treaty commits NATO members to separately and jointly, by means of continuous and effective self-help and mutual aid, maintain and develop their individual and collective capacity to resist armed attack. NATO, 1949

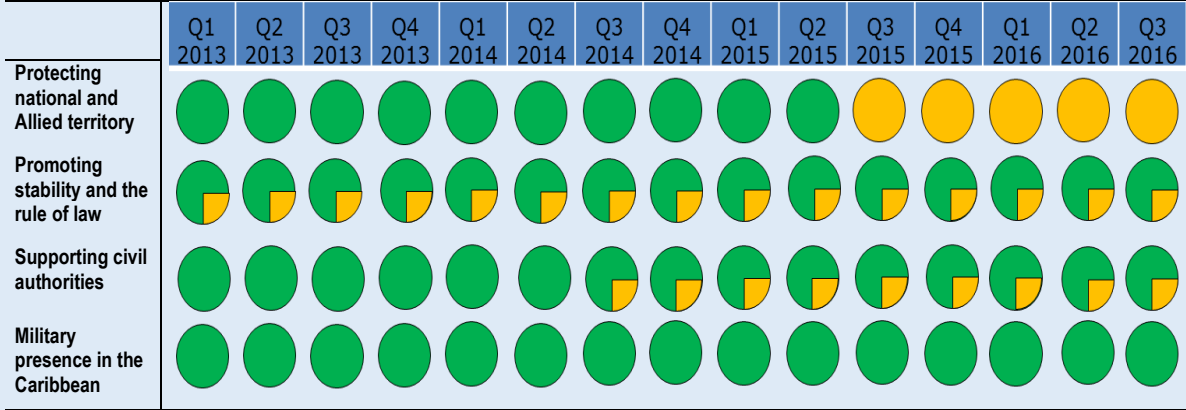
presented in this Chapter, as part of an annual public review in order to promote public discussion and society-wide consensus on the most essential issues of national defence. This is also requested by the Security Strategy of the Slovak Republic¹⁹ and the Manifesto of the Government of the Slovak Republic.²⁰ Spending reviews may support the preparation of public performance assessments and informed decision-making on the adoption of new Capability Targets. Based on the best international practice (Box 7), this review recommends to:

- **Publish an annual Comprehensive Defence Assessment of the Slovak Republic;** adapt the language and presentation of results for the general public;
- **Report on the fulfilment of Capability Targets on a two-year basis,** publish the Overview of NATO Defence Planning Capability Reviews, following the example set by the Netherlands and compare Slovakia's performance with other Allies, as is done by Denmark and the Netherlands;
- **Define public indicators measuring the operational readiness of the AFSR** for the key tasks defined by the Defence Strategy, like the Netherlands;
- **Perform defence spending reviews on a four-year basis** to inform decision-making on the adoption of new Capability Targets.

Box 7: Defence performance reporting: International practices

The Netherlands: Operational readiness review and targets in the national budget. In 2017, the Netherlands published the results of analyses concerning improving military readiness made by a cross-ministerial group in response to audit conclusions indicating the armed forces' limited readiness for carrying out certain core tasks. This also involved a public assessment of operational readiness for the four core tasks of the armed forces arising from the defence strategy. The Dutch general government budget includes targets for operational readiness (capability, number, unit, description) (*Ministerie van Defensie, 2018*).

Figure 1: Performance of the Dutch armed forces against deployability targets (2013-2016)



Note: Green colour denotes "deployable" according to standard; green-yellow denotes "achievable with limitations"; yellow denotes "partially achievable" deployability. Source: Ministerie van Defensie, 2017

The Netherlands and Denmark: NATO review and comparison of indicators against other countries. The Netherlands and Denmark have published unclassified overviews of their NATO defence planning reviews (NATO, 2016ab; NATO, 2018f) as well as their performance on NATO input and output metrics which includes benchmarking against other NATO members (Ministry of Defence of the Kingdom of Denmark, 2011; The Netherlands, 2013).

¹⁹ "Using active communication on the security policy, including explaining the importance of Slovakia's membership of the EU and NATO, the Slovak Republic will take steps to promote the citizen's general awareness and knowledge, build consensus and preserve lasting continuity in principal defence matters of the Slovak Republic." MFEA SR, 2017, item 93.

²⁰ "The Slovak Government will ensure a functioning link between the planning, implementation, control and evaluation of long-term, medium-term and short-term goals, including through establishing regular strategic reviews of state defence and annual comprehensive public assessment of the Slovak Republic's defence." GO SR, 2020.

The **United Kingdom** publishes annual reports and accounts (UK MOD, 2019a), basic defence figures (UK MOD, 2019c), a report on military formations and equipment (UK MOD, 2019b), detailed quarterly personnel statistics (UK MOD, 2020b) and other financial and medical statistics and surveys (UK MOD, 2020a).

In the **USA**, the rebuilding of military readiness is one of a limited number of Presidential priority areas; the publicly disclosed Annual Performance Plan communicates progress towards achieving strategic objectives and performance goals in defence (U.S. Department of Defense, 2020).

NATO publishes selected input indicators of its member countries' defence effort (NATO, 2019f).

The **European Defence Agency (EDA)** publishes selected input and outcome indicators of the Participating Member States (EDA, 2018).

3. Investments

- The majority of military equipment is past service life. Most of the infrastructure requires major repair or refurbishment. The higher allocations foreseen in the upcoming years, supported by measures to improve spending effectiveness, provide room for modernisation.
- The key investment priorities arising from the 2017 Capability Targets include a heavy infantry brigade, passive electronic surveillance (DESM) and participation in NATO's air defence system.
- The Long-Term Capability Development Plan 2030 prioritises other, cost-intensive investment projects without sufficiently justifying their need.
- To enable long-term development and an appropriate investment strategy, it is necessary to prepare a capability requirements catalogue, a new Generic Force Structure (2035) and a Long-Term Capability Development Plan, and to align MOD internal planning with these documents.
- Until the approval of a new Generic Force Structure (2035), this review recommends implementing investment projects only in combat support, combat service support and in maintaining the existing combat potential.
- Terminating or postponing several non-priority projects envisaged in the Long-Term Capability Development Plan 2030 would make it possible to reallocate funds for accelerated implementation of priority projects; the MOD should review these projects in light of the new Long-Term Capability Development Plan.
- Should the procurement of certain projects require an extended preparation phase, this review recommends reallocating funding to implement ready projects for improving the basic infrastructure of the Armed Forces.
- This review demands that all future capabilities and tasks of the new F-16 aircraft squadron are identified and that all acquired platforms are used in the most efficient way in military, economic and political terms.

Table 19: Measures covering Investments

Measure	General government budget reallocation, 2020 - 2022 (EUR million)	Responsibility	Deadline
5	Develop a unified capability requirements catalogue covering national defence tasks and international commitments	MOD SR, GS AFSR, MoF SR	31 Jul 2021
6	Develop a new Generic Force Structure (2035) including a fiscally feasible peacetime structure and a wartime structure	MOD SR, GS AFSR, MoF SR	31 Jul 2021
7	Prepare a Long-Term Capability Development Plan based on the new Generic Force Structure (2035), reflecting the need to build priority capabilities within timeframes corresponding with their importance and plan a stable and foreseeable investment budget	MOD SR, MoF SR	31 Dec 2021
8	Prepare a methodology for the assessment of MOD investment projects	MOD SR, MoF SR	31 Mar 2021
9	In accordance with Law No 523/2004, before starting work on a business case, prepare and publish, or present to the MoF SR, a	MOD SR	continuously

Table 19: Measures covering Investments

Measure	General government budget reallocation, 2020 - 2022 (EUR million)	Responsibility	Deadline
feasibility study in line with the Government Decree No 174/2019 (economic assessment). Ensure that feasibility studies are prepared in accordance with the requirements of the Public Investment Project Evaluation Framework of the Slovak Republic			
10 Systematically include international tendering, including through NATO and EU agencies, in the procurement options considered in project assessments		MOD SR	continuously
11 Review suspended and planned armaments projects on the basis of a new Long-Term Capability Development Plan (8x8 APC, 4x4 AMPV, 3D radars, S-300, 2K12KUB and other investments exceeding EUR 1 million)		MOD SR, MoF SR	31 Dec 2021
12 Until the approval of the new Generic Force Structure (2035), implement only investment projects for combat support, combat service support and maintaining the existing combat potential of combat units of the AFSR that are relevant to the implementation of all alternatives of the future 2021 Capability Targets, and for the basic infrastructure of the AFSR	1,890 (Defence Development programme)	MOD SR, MoF SR	31 Jul 2021
13 Identify all future capabilities and tasks to be carried out by the new F-16 aircraft squadron and ensure that all acquired platforms are used in the most efficient way in military, economic and political terms		MOD SR	30 Sep 2020
14 Revise plans for building a heavy infantry brigade on the basis of the new Generic Force Structure (2035)		MOD SR, GS AFSR	31 Dec 2021
15 Ensure that all investments exceeding EUR 1 million are subject to assessment by the MoF SR		MOD SR, MoF SR	continuously
29 Present the new Long-Term Capability Development Plan to the National Council of the Slovak Republic for approval in accordance with the Law on Defence of the Slovak Republic	Government of the SR, MOD SR	31 Mar 2022	29
30 Complete the setting-up of the Analytical Unit of the MOD in accordance with the methodology for building analytical capacities in public administration	MOD SR	31 Dec 2021	30
31 Quantify the costs associated with the fulfilment of Capability Targets and the achievement of full operational capability of the heavy infantry brigade in line with NATO standards	MOD SR, GS AFSR	31 Dec 2021	31

Source: VfMD, 2020

Three quarters of the Armed Forces' equipment and combat materiel as well as key equipment of the heavy infantry brigade (INF-H-BDE) are past service life²¹ (Annex 4). Over a half of facilities require major repair or refurbishment.²² The routine maintenance allocation amounts to only 22% of the AFSR's requests, which results in further deterioration of infrastructure.²³ Average annual capital expenditure of the Defence Development programme²⁴ reached EUR 183 million in the years 2012 - 2018, making up 20.5% of defence expenditure. The average amount of investment planned for the years 2019 – 2022 is EUR 649 million. The total modernisation spending planned by the MOD SR for those years is EUR 2.59 billion, with more than half of that amount (EUR 1.33 billion) being instalment payments for the F-16 jets. **In order for the Ministry of Defence to ensure the building of the heavy infantry brigade and fulfilment of Capability Targets, it needs to re-prioritise investment projects.**

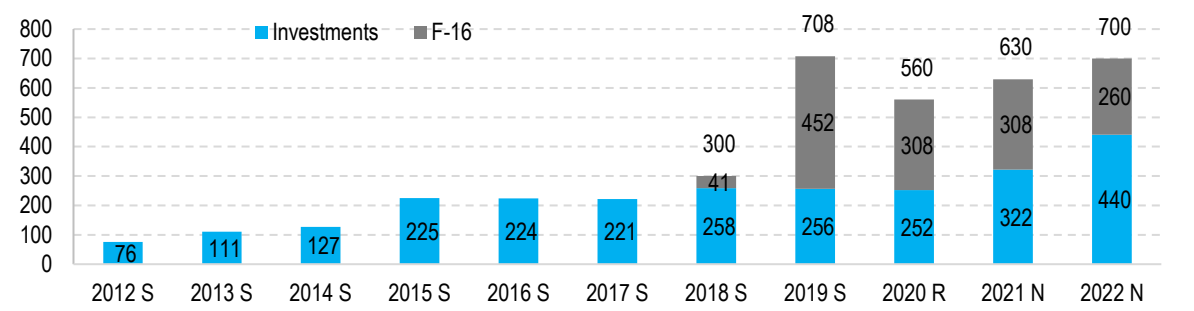
²¹ Based on data provided by the AFSR for 2019. The quantities are inclusive of stores and supplies.

²² Based on data provided by the State Asset Management Office for 2020

²³ Based on the "Answer" document from the State Asset Management Office

²⁴ Based on the GGB programme budget for 2020-2022 and BIS

Graph 6: Defence development expenditure, 2012 - 2022 (EUR million, current prices)



S = Actual; R = Approved Budget; N = Draft Budget

Source: BIS; VfMD

Defence investment issues include not only availability of funding, but also the way of its exploitation. The defence investment plan should be based on two long-term documents: a Generic Force Structure and a Long-Term Capability Development Plan. The 2013 generic force structure is outdated. The existing Long-Term Plan fails to comply with value-for-money principles. It has not been officially approved but the MOD makes investments in accordance with this plan.

This review recommends preparing a unified capability requirements catalogue for the development of capabilities covering both national defence tasks and international commitments. Requirements arising from tasks set forth in national legislation are a legitimate component of defence plans. Currently they are not defined with a sufficient level of accuracy to support the evaluation of their scope and eligibility as is the case with the Capability Targets.

This review recommends designing a new Generic Force Structure (2035). The last publicly communicated generic force structure dates to 2013. The plan does not reflect the Slovak Republic's and the Alliance's defence plans and the current security situation. The document sets the direction of defence development. It describes future capabilities of the AFSR and specifies requirements for human, equipment, infrastructural and financial resources.

This review deems the adoption of a new Long-Term Plan a key prerequisite. The existing Long-Term Plan²⁵ insufficiently prioritises investments contributing to the delivery of NATO commitments. At present, the Slovak Republic has no current and binding Long-Term Capability Development Plan²⁶ to set modernisation priorities and a timeframe for their implementation. Once drafted, the new Long-Term Plan should be presented by the Ministry of Defence for approval to the National Council of the Slovak Republic in accordance with the Slovak Republic's Act on Defence.

The MOD currently follows the Long-Term Plan 2030, which defers priority projects and reduces them in terms of both size and funding. On the other hand, it plans cost-intensive projects without substantiating their necessity. Only three out of ten major projects included in the Long-Term Plan are fully relevant to the implementation of the 2017 Capability Targets; four projects are partially usable for that purpose. Three projects implement capabilities that NATO does not request from Slovakia.

²⁵ Long-Term Capability Development Plan with Emphasis on Building and Developing the Armed Forces of the Slovak Republic with an Outlook to 2030 (Long-Term Plan 2030)

²⁶ The Long-Term Plan 2030 was approved by the Slovak Government but has not yet been approved by the National Council of the Slovak Republic; refer to Box 8: Approval status of the Slovak Republic's defence and security strategies and plans.

Table 20: Major projects of the Long-Term Plan 2030

Capability	Project title	Planned cost (EUR million)	Planned start of project	VfMD proposal	Costs / savings
INF-H-BDE	1. IFV upgrade or replacement	450	2021	Accelerate implementation	-871 to -1,500
INF-H-BDE	2. Tank equipment replacement (T-72)	258	2024	Accelerate implementation	Unknown at present
Partially INF-H-BDE	3. 4 x 4 armoured multi-purpose vehicles	783	2018	Implement partially	+612
INF-H-BDE	4. Zuzana 2	175	2020*	–	+90
Partially NATINAMDS	5. Radars	155	2018	Implement partially	+53
National requirements	6. 8x8 armoured personnel carriers	417	2018	Cancel	+411
National requirements	7. Modernisation of mid-range AAMS (S-300)	605	2018	Postpone	+605-708**
National requirements	8. Replacement of short range AAMS (2K12 KUB)	360	2021	Postpone	+360-470**
INF-H-BDE + all AF	9. Off-road heavy goods vehicle (N3G)	345	2018	Prioritise INF-H-BDE	Unknown at present
Partially NATINAMDS	10. Multi-purpose tactical aircraft (F-16)	1,957*	2018*	Ensure most efficient use	Unknown at present
	Other projects of DP2030	2,661			
Total		8,166			+631 to 844

Note: Projects in bold are fully relevant to the heavy infantry brigade; *Actual; ** As Source: MOD, 2017de; GS AFSR, 2018b; VfMD per Equipment Plan; AAMS = Anti-Aircraft Missile System

Until the approval of a new Generic Force Structure (2035), this review demands to implement only investment projects in the areas of combat support, combat service support and maintenance of the existing combat potential of combat units of the AFSR that are relevant to all alternatives of the future 2021 Capability Targets. For equipment projects requiring extended preparations, this review recommends reallocating funding to projects for the basic infrastructure of the Armed Forces that are already prepared. Investments in the equipment of units should be re-prioritised so that more important units are modernized first.

Box 8: Approval status of the Slovak Republic's defence and security strategies and plans

Based on Section 4 (b) of the Slovak Republic's Defence Act No 319/2002, fundamental state defence and security policies and principal strategic documents and development programmes in the defence and security areas are subject to approval by the National Council of the Slovak Republic upon proposal by the Government.

Documents approved by the National Council of the Slovak Republic:

- Security Strategy of the Slovak Republic, 27 September 2005
- Defence Strategy of the Slovak Republic, 23 September 2005

Documents approved by the Government of the Slovak Republic:

- White Paper on Defence of the Slovak Republic, 28 September 2016
- Security Strategy of the Slovak Republic, 4 October 2017
- Defence Strategy of the Slovak Republic, 4 October 2017
- Military Strategy of the Slovak Republic, 4 October 2017
- Long-Term Capability Development Plan of the Slovak Republic, 4 October 2017

3.1. Prioritisation of the 2017 Capability Targets

Priority projects

According to the 2017 Capability Targets, Slovakia's priorities include a heavy infantry brigade and passive electronic surveillance capabilities (DESM). This review of investment projects is based on available NATO data; information on capabilities arising from national defence requirements were not made available to the Ministry of Finance. However, the new defence development documents will also assess projects against clearly defined national requirements.

The building of a heavy infantry brigade and radar coverage will cost at least EUR 2.4 billion, while a part of costs still remains not quantified (Table 21). According to the General Staff's plan, the heavy infantry brigade first needs tracked armoured personnel carriers, tanks, armoured multi-purpose vehicles and self-propelled howitzers (GS AFSR, 2018ab). Further required equipment includes trucks and logistic and engineer equipment for the brigade (Annex 3). To ensure full-fledged integration into the common air defence system (NATINAMDS), Slovakia needs to have fighter aircraft and to ensure the radar coverage of airspace. An implementation plan for the passive electronic surveillance system was not available to the Ministry of Finance.

Table 21: Investment priorities according to the 2017 Capability Targets

Capability	Project	Quantity (units)*	Estimated cost (EUR million)
Heavy infantry brigade	New (tracked) APC	164	871 – 1,500
	New tank	49	258+
	Part of 4x4 AMPV project	88	170
	Self-propelled howitzers	24	175
	Other, with cost estimate	164	157
	Other, without cost estimate	326 – 336	N/A
	Total INF-H-BDE		1,631 – 2,260+
DESM	Electronic Surveillance System	N/A	N/A
NATINAMDS	Radars	8	102
Total			1,733 – 2,362+

AAMS – Anti-Aircraft Missile System; DESM – passive radars; NATINAMDS – NATO Integrated Air and Missile Defence System; *According to the heavy infantry brigade implementation plan and the presented radar project

Source: MOD, 2017d; GS AFSR, 2018ab; MOD, 2019i; VfMD

1. The General Staff's plan foresees at least 164 tracked combat vehicles, while the Long-Term Plan 2030 envisages the upgrade/replacement of 105 units only. The upcoming documents should clearly indicate the required quantity. The envisaged costs of the planned project (EUR 450 million,²⁷ EUR 4.3 million per unit) do not correspond to the average price of this type of vehicle (EUR 8.9 to 9.4 million per unit,²⁸ Table 22). It is possible that some 8x8 armoured personnel carrier models are able to meet the technical standards of a heavy infantry brigade²⁹ at a lower purchase price (EUR 5.31 million per unit³⁰). The Ministry of Defence should, therefore,

²⁷ EUR 70 million needs to be added to the amount which is earmarked in DP2030 for the purchase of tracked medical vehicles.

²⁸ These are average prices; differences may be significant, depending on model and version.

²⁹ NATO's minimum standards for infantry fighting vehicles for a heavy infantry brigade include, among other things, level 5 ballistic protection of crew, level 3 mine protection of crew; a cannon with firepower sufficient to penetrate level 4 armour; and high mobility in a high-intensity battlefield.

³⁰ The Boxer vehicle version designed for Australia's armed forces has level 5 to level 6 ballistic protection and a 30 mm cannon. It thus meets ballistic protection and firepower requirements for a heavy brigade. The exact unit price is impossible to estimate since the amount declared is inclusive of non-quantified and unspecified support. Because of these unknown data, and with a view to offering a conservative estimate, we indicate a sum exclusive of support. Price: AUD 7.99 million, converted to EUR 4.43 million using the ECB rate as at 1 April 2020 (AUD/EUR 1.8053); with 20% VAT added: EUR 5.31 million.

Direct link: <http://www.defence.gov.au/spi/docs/public-aic-plan-land-400-phase-2-acquisition-rheinmetall.pdf>

reconsider the various technical requirements and obtain NATO's opinion. The proposed project implementation period, which is now scheduled for 2024 to 2030, is not commensurate to the importance of the priority for which the purchase is intended. This review proposes that the project should be prepared and implemented without delay.

Table 22: Budget and supply of Puma tracked vehicles for German armed forces (Bundeswehr)

	Budget (EUR million)	Plan (units)	Delivery (units)	Plan: price/unit (EUR million)	Delivery: price/unit (EUR million)
2016	500	59	64	8.47	7.81
2017	580	62	71	9.35	8.17
2018	650	70	72	9.29	9.03
2019	700	67	67	10.45	10.45
Total	2,430	258	274	9.42	8.87

Source: Bundesministerium der Finanzen, 2016, 2017, 2018, 2019; Bundesministerium der Verteidigung, 2016, 2017abc, 2018, 2019ab.
Analysis and calculations: VfMD

2. The General Staff of the AFSR claims a need for at least 49 tanks in four versions (Annex 3). The procurement of new tank equipment is scheduled for the period 2026 - 2030 in the Long-Term Plan 2030. It is in conflict with the intended priority level of this project. The Long-Term Plan does not particularise the quantity of tank equipment, but the planned allocation seems to be undervalued relative to the General Staff's requirements (EUR 5.3 million per unit). A high risk exists that the final cost may be higher. The MOD should consider purchase of used equipment, upgraded to the highest standard, as an option to reduce the purchase price.

3. The quantity of 4x4 vehicles could be reduced to one quarter (88 units; refer to Annex 3) which is required for priority capabilities; the rest is intended for other parts of the Armed Forces. Heavy infantry brigade units should be clearly prioritised in furnishing with 4x4 armoured multi-purpose vehicles.

4. With an international call for tenders, the cost of Zuzana 2 howitzers could have been reduced by approx. EUR 90 million. The Government-approved material did not compare any alternatives or evaluate the economic and financial efficiency of the project, neither did it assess the declared positive economic impact of possible sale of howitzers abroad (MOD, 2018d). The comparison made by VfMD indicates a potential for saving achievable if an international call for tenders was organised (Table 23). The Ministry of Defence should consider other ways to ensure compliance with NATO standards for artillery, such as through upgrading the existing howitzers.

Table 23: Self-propelled howitzers with comparable parameters

Model	Lowest known price (EUR mil. per unit)	Highest known cost (EUR mil. per unit)
Zuzana 2		7.0
Archer (SWE)	-	-
K – 9 (ROK)	3.1	7.0
PzH 2000 (DEU)	2.0	3.4

Note: The prices may reflect different levels of purchased support.

Source: Army Recognition (2017); Delfi (2015); Ministry of Defence of the Republic of Slovakia (2017); The Diplomat (2017).

5. Slovakia's airspace radar coverage (NATINAMDS capability) requires 8 NATO-compatible radars. A reduced number of radars than the proposed 17 units may result in saving EUR 53 million (MOD, 2019i). The non-priority part of the planned purchase should be conducted within the framework of the individual modernisation projects for which the radars are intended.

The Ministry of Finance did not have access to sufficient information to evaluate the progress status of the last priority, the implementation of the passive electronic surveillance capability (DESM).

Non-priority and ineffective projects

6. This review recommends cancelling the planned acquisition of 8x8 APCs as presented for government approval (MOD, 2018e). It does not support the need to build a heavy infantry brigade. The Ministry of Defence's equipment plan links this project to the targeted building of three motorized battalions (MOD, 2017e). These are medium-type units which do not meet heavy infantry brigade standards. The General Staff's plan foresees the assignment of one medical 8x8 APC to each heavy infantry battalion (three vehicles in total; GS AFSR, 2018ab). The heavy battalions should also have three tracked medical vehicles. The replacement of an 8x8 APC vehicle by a medical vehicle with a chassis uniform with the rest of the brigade may lead to a reduction in logistic load. One type of vehicle for which specific spare parts, infrastructure and operator staff are needed would be excluded.

7. This review recommends reconsidering the upgrade of the S-300 system during the drafting the new strategic documents; postponement would create a fiscal allowance of EUR 708 million in the upcoming years. The project should be deferred until the priority capabilities are built and the new Generic Force Structure (2035) developed. The equipment plan of 2017 links the project to meeting the NATINAMDS capabilities, while neither the 2017 Capability Targets nor any other available documents of the MOD and the AFSR mention this task in connection with the S-300 system. To the contrary, they link this capability to domestic crisis management (MOD, 2019h, 2018a). The upgraded system is to incorporate features to ensure compatibility with NATO systems, but experience of other NATO countries suggests that this approach has not been successful yet. The Ministry of Defence plans to upgrade the existing mid-range anti-aircraft system, S-300PMU to the S-300PMU-2 standard or the S-400 standard; the envisaged cost is EUR 605 – 708 million and the project is scheduled for 2021 – 2030 (MOD, 2017e).

8. This review recommends considering postponement of the replacement of the 2K12KUB system until the priority capabilities are met. The postponement would create a fiscal allowance of EUR 470 million in the upcoming years. Future necessity of replacement should be determined on the basis on the new Generic Force Structure (2035). The available documents link the project to domestic crisis management, while NATO does not request the anti-aircraft missile system capability of Slovakia (MOD, 2017e, NATO, 2017). The Ministry of Defence plans to implement the project in the years 2023 to 2030 and its envisaged value is EUR 360 - 470 million.

Cancellation of the S-300 units and a part of the 2K12KUB system in the new Generic Force Structure (2035) would deliver an annual saving of 5.5 to 7 million. This is achievable by reallocating 185 to 235 military positions.³¹ This review recommends retaining high-quality, skilled personnel to the largest extent possible and retraining them, as appropriate, for exploitation in other positions within the MOD.

³¹ This may include operator, supply, support and command positions in peace-time table numbers. The operation of firing equipment of the S-300 system involves 41 soldiers and the operation of radars 55 soldiers. The number of remaining support and command personnel of the 1st Anti-aircraft Missile Brigade Group of the Air Forces of the AFSR is 145. Ninety soldiers work directly in three 2K12KUB firing batteries. Also, it is advisable to reconsider the numbers of other personnel of the command, management and support units of the 2nd Anti-aircraft Missile Brigade Group. Numbers of soldiers taken from GS AFSR, 2018c

9. Priority heavy infantry brigade equipment projects in which most progress has been achieved include purchases of N3G and N2G truck vehicles, which have been implemented on a continuous basis. They should, however, be utilized to equip the priority units first. As regard the implementation status of other projects, the Ministry of Finance did not have sufficient information to review this and the projects will be assessed within the framework of the preparation of new long-term documents.

10. It is necessary to identify all future capabilities to be provided and tasks to be carried out by the new F-16 aircraft squadron and ensure that all acquired platforms are used in the most efficient way in military, economic and political terms. NATO recommends in its Capability Review (NATO, 2020a) postponing the intended purchase of 14 fighters and reallocating the funds to build the heavy infantry brigade earlier, though without specifying explicitly the number of fighters required for air-policing operations.

3.2. Investment Management and Preparation

The new Generic Force Structure (2035) should define an optimum wartime model of the AFSR and facilitate transparent decision-making on a peacetime model of the Armed Forces that is financially sustainable and achievable.³² The model must reflect the national and Alliance defence plans adopted in recent years. The capabilities defined in the current 2017 Capability Targets and the upcoming 2021 Capability Targets should form the core of the Armed Forces and this review recommends quantifying costs of the Capability Targets and of the achievement of operational readiness of the units included in the heavy infantry brigade.

Better interlinking of the internal investment and planning processes is required. The Ministry of Defence is preparing long-term, medium-term and short-term investment plans and public procurement plans that are not mutually interlinked.³³ This poses a barrier to sound investment management.

This review recommends standardizing the contents and level of detail of feasibility studies of investment projects as well as the investment process. Feasibility studies are mutually inconsistent. They differ in the level of detail in the specification of needs and costs and technical specification. A number of claims and recommendations in feasibility studies, including the identification of needs, scope of procurement and technical specification, closer verification is not possible. Content and process standardisation would bring enhanced transparency of the investment preparation process.

Feasibility studies should provide a detailed description of the necessity and scope of investment based on actual minimum needs. Overestimation of needs or of the scope of equipment purchases goes to the detriment of funding for other priorities. The AFSR's concrete technical requirements are either not sufficiently described in tender documents or excessively specific, due to which alternatives are excluded. Alternative procurement methods are often insufficiently considered and international tendering or acquisition options, such as through NSPA or EDA, are disregarded.³⁴

³² The Military Strategy of the Slovak Republic sets the goal of developing a new basic model of the AFSR and, subsequently, an economically substantiated model of feasible forces based on long-term predictions of economic indicators, which will be implemented as part of the transformation of the peace structure of Slovak Armed Forces. The difference between the basic model and the peace structure of the Armed Forces of the Slovak Republic will be in mobilized reserves. MOD SR, 2017b; item 26

³³ White Paper on Defence of the Slovak Republic, MOD SR, 2016, pp. 48 -50

This need was confirmed during personal consultations with the MOD and it is also obvious from a comparison of the Long-Term Plan, Programme Plan and the budgeted investment projects (status as at March 2020).

³⁴ NATO Support and Procurement Agency; European Defence Agency

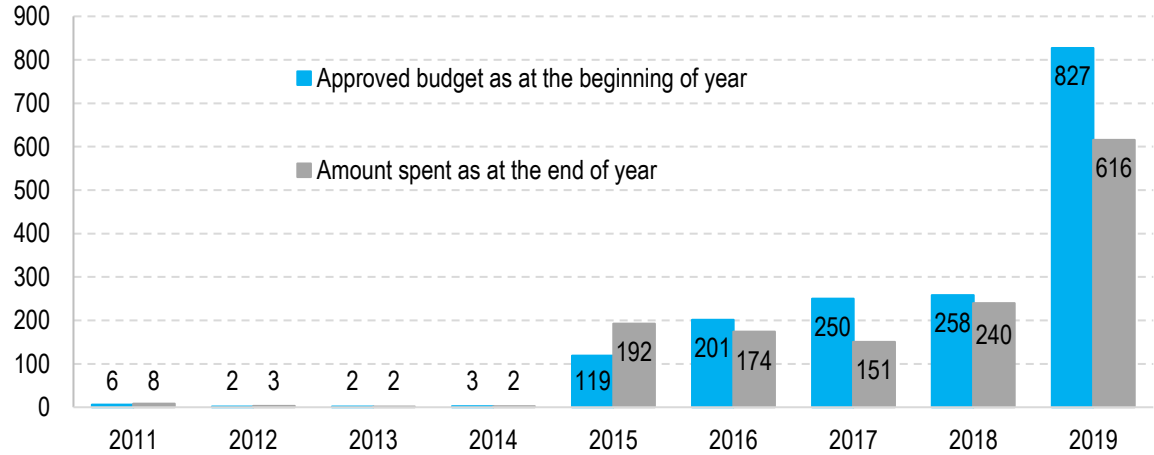
Only those parts of documents whose disclosure would pose a security risk, or which are subject to trade secrecy, should be classified. Classification of a feasibility study as a whole disables an appropriate public assessment of the study.

Based on law³⁵, feasibility studies concerning investments and IT expenditure must be published or forwarded to the MoF SR for evaluation. The Ministry of Defence should prepare feasibility studies in accordance with the methodological requirements of the Slovak Republic’s Public Investment Project Evaluation Framework. The Ministry of Finance will evaluate all investment projects and all IT expenditure exceeding EUR 1 million.

The Ministry of Defence has no specific methodology for assessing defence investments; this review recommends developing such methodology. The methodology will define procedures and methods addressing defence-specific issues in conformity with the current general documents³⁶. Such methodology is a standard at other Ministries where high capital expenditure is involved.³⁷ Such methodology is usually prepared by a Ministry’s analytical unit in cooperation with the Ministry of Finance.

The review recommends building up the Analytical Unit of the MOD in accordance with the methodology for building analytical capacities in public administration. The analytical unit should provide internal advice on the application of the value-for-money methodology and assistance in spending reviews, and facilitate expert dialogue with external partners and the public in the relevant field. A high quality analytical unit, provided with appropriate staffing, organisation and material resources is in the interest of enhancing the quality of the defence investment preparation process.

Graph 7: Investment budget implementation, 2011 -2022 (EUR million)



Source: BIS; VfMD

The capital expenditure budget has a low informative capacity. Since 2016, the implementation of budgeted allocations to projects has not been as expected and substantial re-allocations are occurring, both between years and during a year (e.g. allocations to 4x4 AMPVs and 8x8 APCs were re-allocated to different purposes through a budgetary measure in 2018 and 2019). Long-term preparation and planning of investment projects is an important factor in the budgeting and use of investment allocations, as it may enhance both the quality and foreseeability of future investments.

³⁵ Act No 523/2004 on general government budgeting rules
³⁶ Slovak Republic’s Public Investment Project Evaluation Framework; Methodological Guidance on the Preparation of Investments and Concessions Subject to Evaluation by the Ministry of Finance of the Slovak Republic
³⁷ Ministry of Transport and Construction of the Slovak Republic, Office of the Deputy Prime Minister of the Slovak Republic for Investments and Informatization, Ministry of Environment of the Slovak Republic

4. Operating Costs

- The Ministry of Defence's operating expenditure reached EUR 1 billion in 2019. Personnel expenses make up nearly 60% of the Ministry's current expenditure; one third is on goods and services. The Ministry's expenditure on goods and services is the second highest of all chapters of the general government budget.
- Slovakia's number of military personnel per capita is at the median of the reference group. Compared to the reference countries, the planned increase in the number of troops by 2030 seems to be oversized and insufficiently justified.
- Professional military pay is higher than in other countries; related to the average wage in the economy, it is 48 percentage points higher than the median of the reference countries. In 2019 and 2020, military wages grew faster than those of most public service employees. In 2020, the year-on-year increase is even projected to increase by 20%.
- The salaries of civil servants at the MOD are the second highest of all Government Ministries.
- The system of military retirement pensions runs a deficit and must be subsidized by the state (0.1% of GDP, i.e. EUR 90 million per year). Over the long term, the implementation of past reforms will reduce the deficit to 0.01% of GDP per year.
- This review estimates that optimising MOD and AFSR spending on personnel may save over EUR 114 million annually. Other operating costs have a potential to bring further savings. The gradual alignment of military wages with the reference countries median would bring EUR 100 million in savings. Reductions in the size of the AFSR command and control structure and replacement of military positions by civilians, combined with the adjustment of salaries to the median of the reference countries, can generate further savings. Moreover, better procurement of uniforms could annually save EUR 200 thousand.
- The IT expenditure of the MOD is to double to EUR 55 million by 2022. The efficiency of IT spending could be improved through the introduction of analytical monitoring, including the monitoring of expenditure on standard IT administration systems through the general government budget.

Table 24: Saving measures covering Operating Costs versus no-policy-change scenario

		Saving potential					Responsibility	Deadline
Measure / Sub-measure	Potential, structural (EUR million)**	2020	2021	2022	2023			
1	Save 10% on personnel expenses (optimisation audit)	12.3	-4.1	12.8	13.5	14.1	MOD SR	31 Dec 2020
1.1	(of which) Optimise support activities of the MOD	1.3 – 2.4		1.0	1.7	2.7	MOD SR	31 Dec 2020
2	Optimise personnel expenses of AFSR command structures	TBD*		5.1	11.3	17.7	MOD SR, GS AFSR	31 Dec 2021
3	Freeze expenses on wages of professional military personnel until they reach the same level as those of the reference group	101.9	0	16.0	35.5	55.4	MOD SR	annually
4	Optimise operating expenses not covered by this review (subject to analysis)	TBD		TBD	TBD	TBD*	MOD SR, MoF SR	31 Mar 2021
Total		114.2+	-4.1	33.9	60.3	87.2		

* EUR 77 million according to the MOD data, the data requires validation; this may overlap with Measure 1 for a part of civilian employees Source: VfMD, 2020

** Structural potential is the amount which savings could reach if fully achieved in the first year.

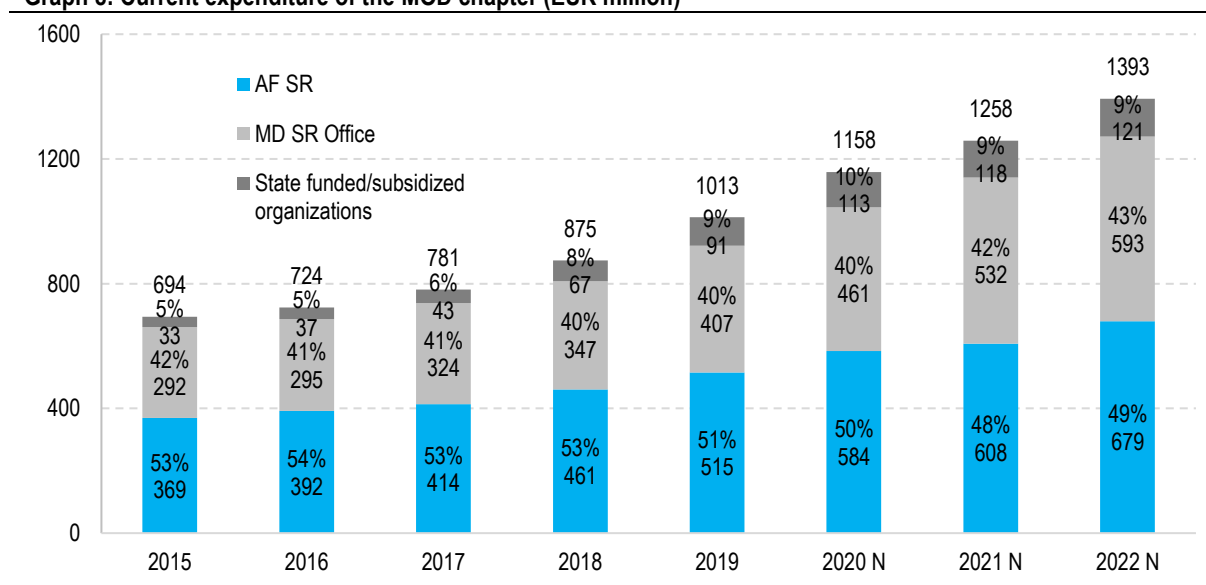
Table 25: Management measures covering Operating Costs

Measure	Responsibility	Deadline
16 Develop a concept for the development of public administration information systems used by the MOD pursuant to Law No 275/2006 as part of the new Generic Force Structure (2035)	MOD SR	31 Dec 2020
17 Ensure that all MOD IT expenditure exceeding EUR 1 million is subject to assessment by the MoF SR	MOD SR, MoF SR	continuously
18 Base budgets for ICT services and hardware procurement on prices prevailing in the market and in public administration instead of listed prices	MOD SR	continuously
19 Budget expenditure on IT systems of the AFSR, military intelligence and military police under a separate budget programme. Budget and prepare public administration information systems used by the MOD in accordance with the OEK methodological guideline	MOD SR	30 Sep 2020
35 Review the military retirement pension system	MoF SR, MOD SR	30 Jun 2021

Source: VfMD

The Ministry of Defence's operating expenditure reached EUR 1.014 billion in 2019 (Graph 8). As a percentage of the total expenditure of the chapter, it is similar to the average of other Ministries. More than one half of the Ministry's current expenditure was the Armed Forces' expenditure (EUR 515 million) and approx. 40% was the expenditure of the Ministry Office, Military Police and Military Intelligence³⁸ (EUR 407 million). The Office's current expenditure includes retirement pensions (for years of service) and services and material procured for the AFSR. The Ministry of Defence's subordinated organisations spent approx. one tenth of the total expenditure (EUR 91 million).

Graph 8: Current expenditure of the MOD chapter (EUR million)



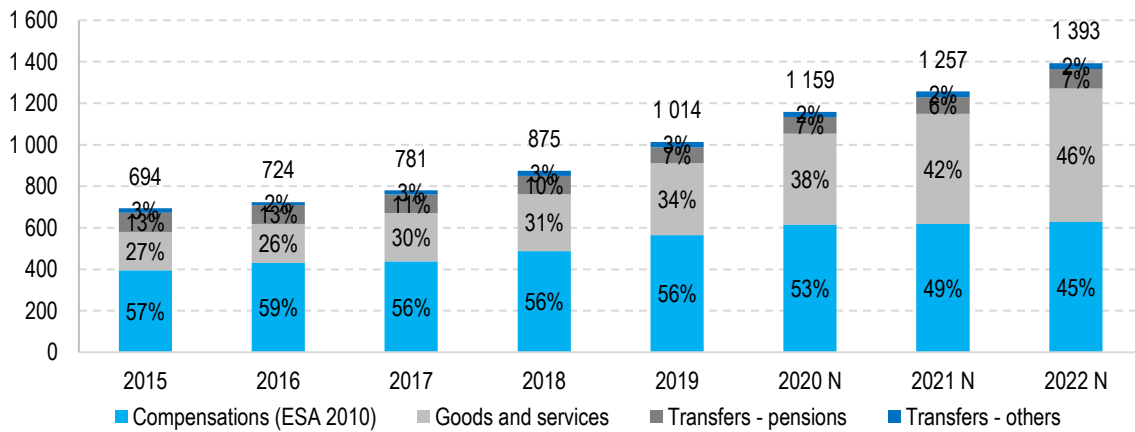
Source: BIS; MoF SR

Nearly 60% of current expenditure is on personnel (compensations) and one third is on goods and services. Compensations amounted to nearly 60% of all current expenditure in the years 2016 to 2019. Expenditure on goods and services³⁹ amounted to nearly one third of current expenditure, ranging between EUR 190 – 348 million. The rest of current expenditure was pension transfers (EUR 75 - 91 million) and other transfers (EUR 14 - 21 million),

³⁸ Identification of the individual units' expenditure is impossible because of unavailability of data.

³⁹ Except certain items included in compensations according to the ESA 2010 methodology (travel allowances, meal allowances). Information about the methodology is provided in Annex 6.

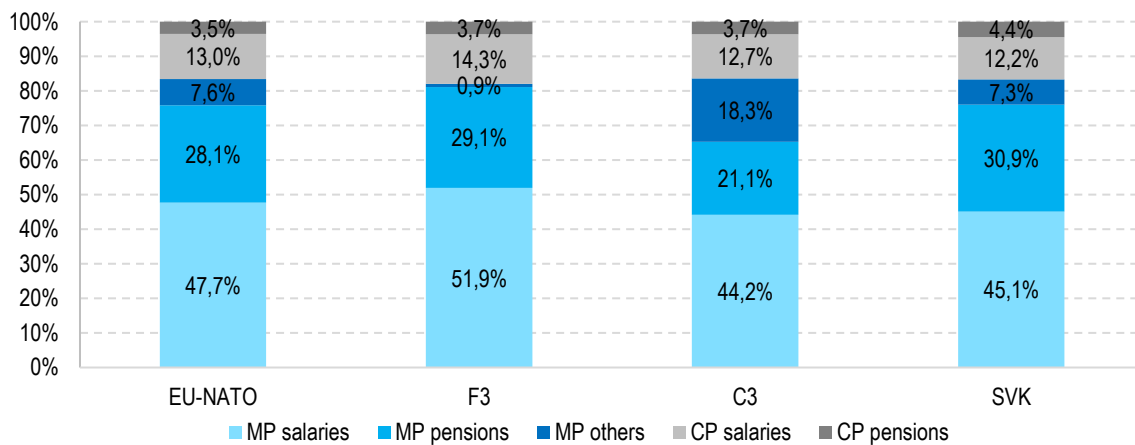
Graph 9: Structure of the MOD current expenditure (EUR million)



Source: BIS; MoF SR

Compared to the reference group, the key difference lies in the amount of personnel expenditure as a share of total expenditure (Graph 2), not its structure. The proportion between personnel expenditure on military personnel and that on civilian personnel is comparable to the reference groups (Graph 10). A difference is in the structure of military personnel expenditure, with Slovakia's expenditure on military personnel's pensions being at the founding group's level. It is, however, 10 percentage points higher than the Central European group. For soldiers' salaries, their share of Slovakia's personnel expenditure was comparable to the Central European group, while the founding group spent on salaries 6.8 percentage points more. The highest differences are seen in the category of *other* personnel expenditure on soldiers⁴⁰: the Central European group spends more than twice Slovakia's expenditure; for the founding group, this heading amounts to less than one per cent of total personnel expenditure.

Graph 10: Breakdown of personnel expenditure of selected NATO countries, averages for 2012-2018



MP - military personnel; CP - civilian personnel

Note: The comparison overviews all EU-NATO countries that reported data to NATO in the required structure, using averages. C3 in the years 2012 – 2014 without Lithuania. Hungary did not report detailed data in 1.1 and 1.2 headings for 2018; the average of expenditure of 2017 is used. Military personnel pensions include, besides retirement pensions, the employer's contributions to pension saving (headings 1.1.2 and 1.3.1 of the NATO defence expenditure nomenclature). Civilian personnel pensions include, besides retirement pensions, the employer's contributions to pension saving (headings 1.2.2 and 1.3.2 of the NATO defence expenditure nomenclature).

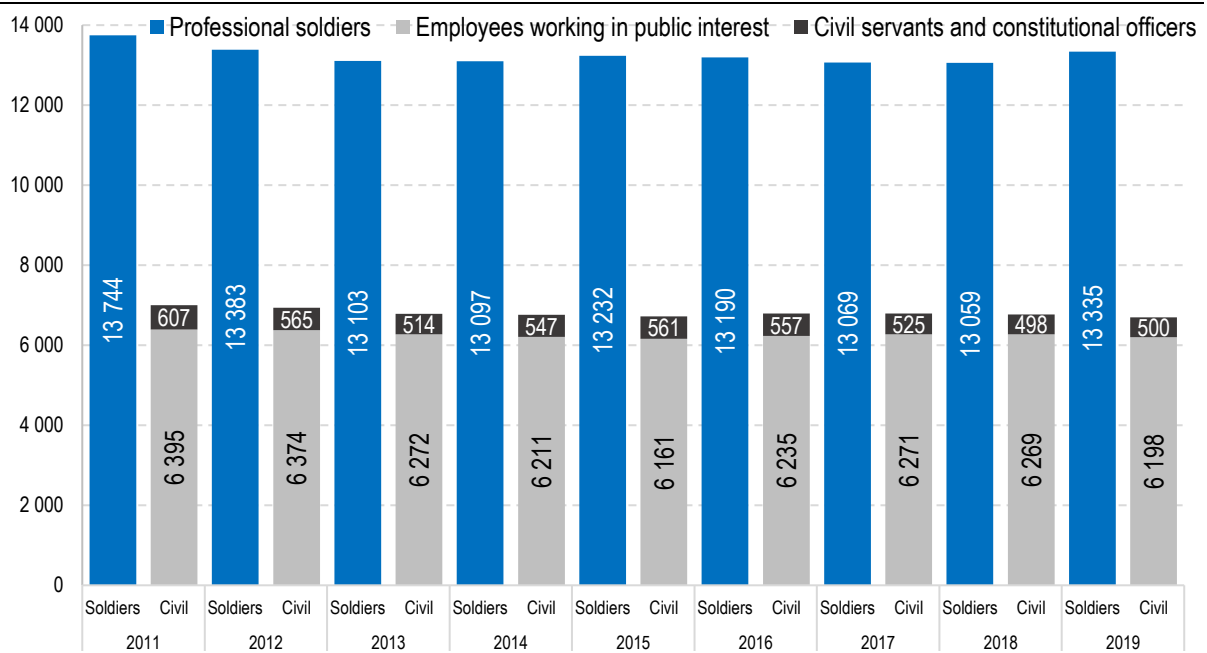
Source: NATO, 2018g; NATO, 2019c; NATO, 2020b. Calculations: VfMD

⁴⁰ This heading includes *sundry personnel expenditure* (such as on military courts, religious services, recreational activities); *travel expenses related to recruiting or permanent transfer to another location*; *severance payments*; *leave travel allowances for soldiers and their families*; *meal and accommodation allowances*; *costs of soldiers' uniforms and attire*; *all types of meal service arrangements for soldiers*. The heading does not include travel expenses of ordinary activities.

4.1. Employment and compensations

The Ministry of Defence employs about 20 thousand people, of which approx. two thirds are military personnel and one third is civilian employees. Their absolute numbers are stable in recent years. Most of the civilian personnel (over 90%, approx. six thousand) performs work of public interest and the remaining about 500 employees are civil servants. The Ministry controls a number of subordinated organisations, the major ones being the *M.R. Štefánik* Armed Forces Academy (AFA) with about 600 employees⁴¹, the Training Centre in *Lešť* (380 employees) or *DUKLA Banská Bystrica* Military Sports Centre (175 employees). The Ministry also controls the SNP Central Military Hospital in *Ružomberok* which, however, is outside the scope of this review.

Graph 11: Average headcount of the MOD's organisations



MP - military personnel; CP - civilian personnel

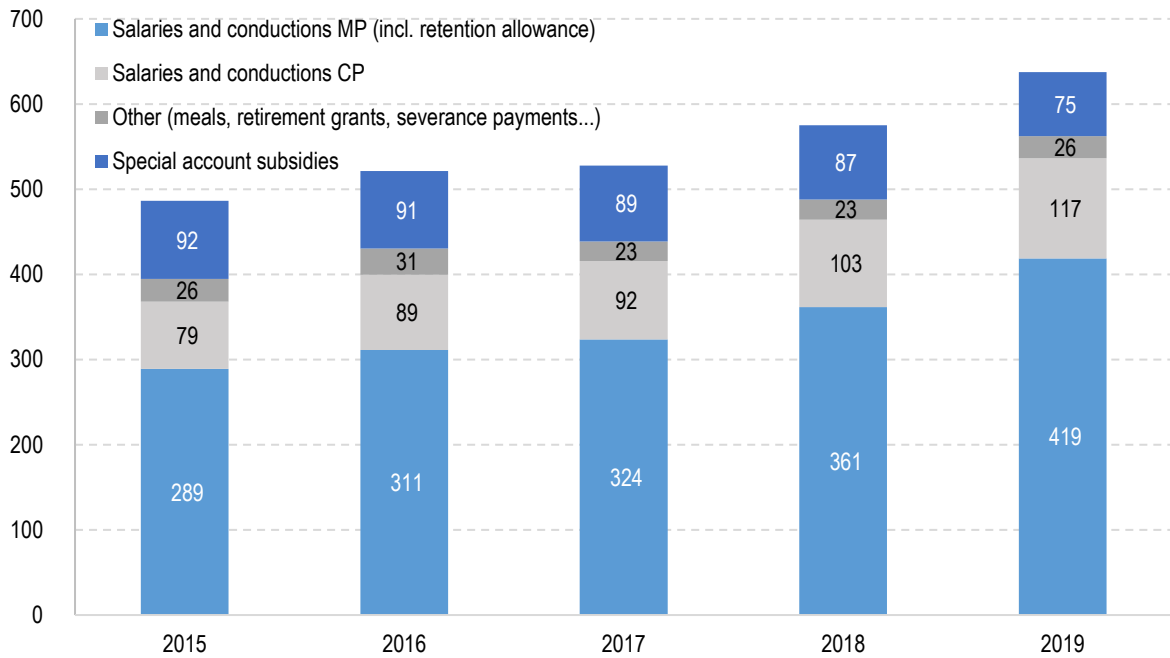
Source: Wages and Salaries BIS, MoF SR

The Ministry spent over EUR 600 million on employee compensations⁴² in 2019. 74% of the total compensation amount was spent on salaries, public health and social insurance premiums and retention allowances of soldiers who make up approx. two thirds of all employees. Wages, salaries and contributions for the remaining third of employees amounted to about 21%, and the 5% remainder was spent on other employee compensation items (meals, travel allowances, severances, etc.). Further EUR 75 million was expended on funding extra costs of retirement pensions of former military personnel (special account).

⁴¹ In 2018, cadets accounted for 53% of AFA employees. Cadets are soldiers and officers in the preparatory service, undertaking specialized education before the entry into civil service as professional soldiers. They are thus Academy students who are registered as its employees for administrative purposes.

⁴² According to the ESA 2010 methodology, employee compensations include wages and salaries, public health and security insurance premiums, a part of travel expenses and selected service items (such as meals) and transfer items (such as severance payments). Information about the methodology is provided in Appendix 7.

Graph 12: MOD employee compensations in EUR million



MP - military personnel; CP - civilian personnel

Source: BIS, MoF SR and calculations made by VfMD

The AFSR staffing is at the level of 76% of the plan. It had decreased every year until 2018. The planned numbers of the AFSR's soldiers are not reflected in the number of authorised professional soldier positions, which is around 14,000. Except 2009, the total staffing of the AFSR has not exceeded 90% of the plan, and it was even below 80% of planned numbers in 2016-2018. The average staffing of the combat battalions supposed to be incorporated in the heavy infantry brigade declared to NATO and to be the priority choice for rotation in high-readiness forces⁴³, was only 65%.⁴⁴

Table 26: Numbers of soldiers of the AFSR, comparison to the plan

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Plan	17,929	17,966	16,075	15,803	15,809	14,772	14,782	14,854	15,070	15,591	16,150	16,267	
Actual	15,521	15,529	14,764	14,199	13,959	12,497	12,284	12,421	12,579	12,333	12,309	12,342	
Percentage of plan (%)	86.6	86.4	91.8	89.9	88.3	84.6	83.1	83.6	83.5	79.1	76.2	75.9	
Authorised											14,212	14,212	14,100

* Actual numbers of professional soldiers of the AFSR. The numbers are inclusive of professional soldiers who were not included in the registered headcount, i.e. who were not receiving salary (maternity/parental leave, unpaid leave of absence).

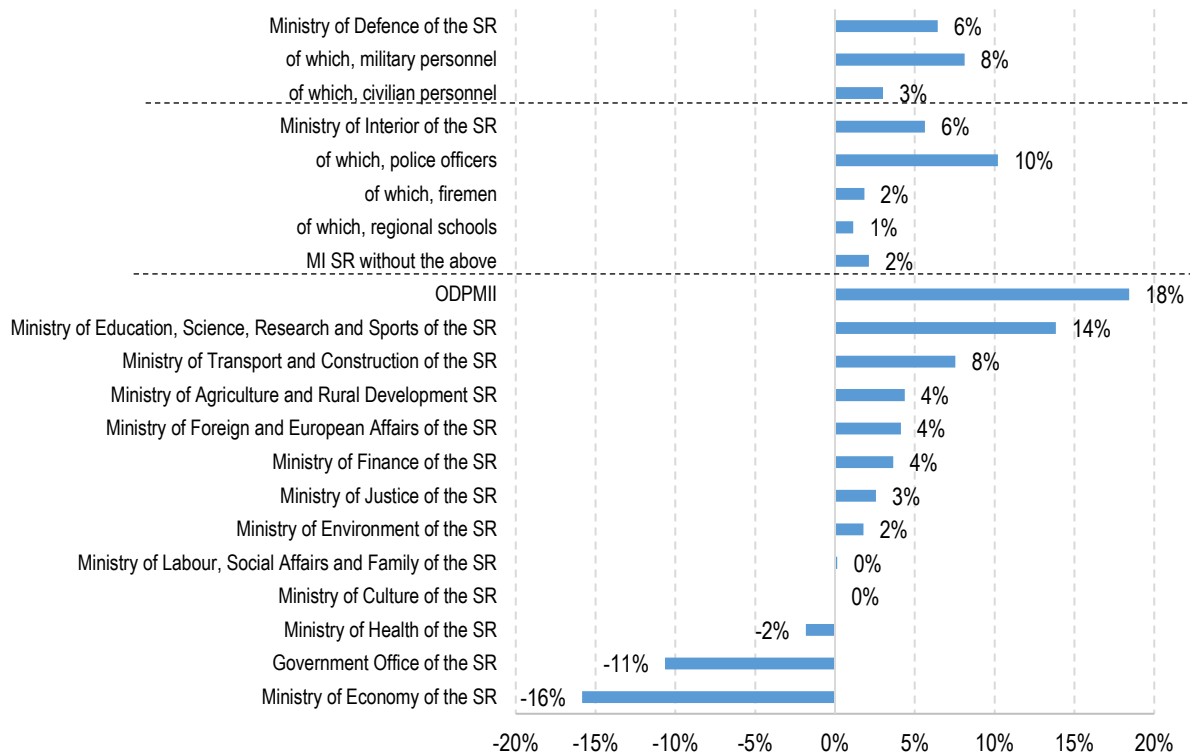
Source: MOD Personnel Office, based on AU, 2019

The Ministry of Defence and the MI SR have the highest proportions of unstaffed positions. The vacancy rate is over six per-cent, and even more than eight per-cent for soldiers. For civilian personnel, the proportion of vacant jobs was around 3% in 2018, which is about the same level as other Ministries. Because of the vacancies, the average salary of the Ministry's civilian personnel rose in 2018 from budgeted EUR 927 to actually paid EUR 957. The proportion of vacant military positions (8%) is comparable to that of police officers (10%); thanks to re-distribution of funds earmarked for vacancies, the average monthly salary of military personnel is more than EUR 120 higher.

⁴³ Martin-based 11th Mechanised Battalion, Nitra-based 12th Mechanised Battalion and Levice-based 13th Mechanised Battalion

⁴⁴ Data as of 30 June 2019 MOD Personnel Office, based on AU, 2019

Graph 13: Ministries' vacancy rates, related to adjusted staffing limits (2018)



Note: The differences between planned and actual numbers of employees is shown.

Source: Wages and Salaries BIS; MoF SR; and calculations made by VfMD

Professional soldiers

Slovakia's number of soldiers relative to the population is at the median level of the reference group. The numbers of soldiers per 1,000 of population of the reference countries range between 1.9 and 5.1. Hungary has the lowest number of soldiers and Lithuania the highest; Lithuania doubled the size of its armed forces in few years in response to Russia's assertiveness. If the size of the AFSR had reached the average level of the reference group (2.8 soldiers per 1,000 of population), Slovakia would have had 15,300 soldiers in 2018. The actual number of the AFSR's professional soldiers was 11,680 in 2018,⁴⁵ with over 3,900 planned⁴⁶ positions remaining vacant.

Table 27: Numbers of soldiers per 1,000 inhabitants (2018 and plans by 2030)

	2018 A	2020 P	2022 P	2025 P	2030 P
Slovakia	2.2		2.8	3.0	3.3
C3+F3*	2.3	2.5	2.8	3	
Czech Republic	2.3			2.5	2.8
C3					
Hungary	1.9				
Lithuania	5.1				
F3					
Denmark	3				
Belgium	2.3				
Netherlands	2.3				

Note: * Medians of the reference countries taken from the respective annual armed forces development plans reported to NATO.

Source: Eurostat; Defence Expenditure of NATO Countries (2013 – 2019); Long-Term Plan 2030; Koncepcie výstavby Armády ČR 2030; NATO, 2019c. Analysis: VfMD

A - Actual, P - Plan

⁴⁵ Numbers of soldiers in the AFSR published by NATO (NATO, 2019f)

⁴⁶ The number of planned positions is higher than the number of professional soldier positions foreseen in the authorisation of professional soldiers, which includes also soldiers outside the AFSR (Personnel Office of the MOD, based on AU, 2019)

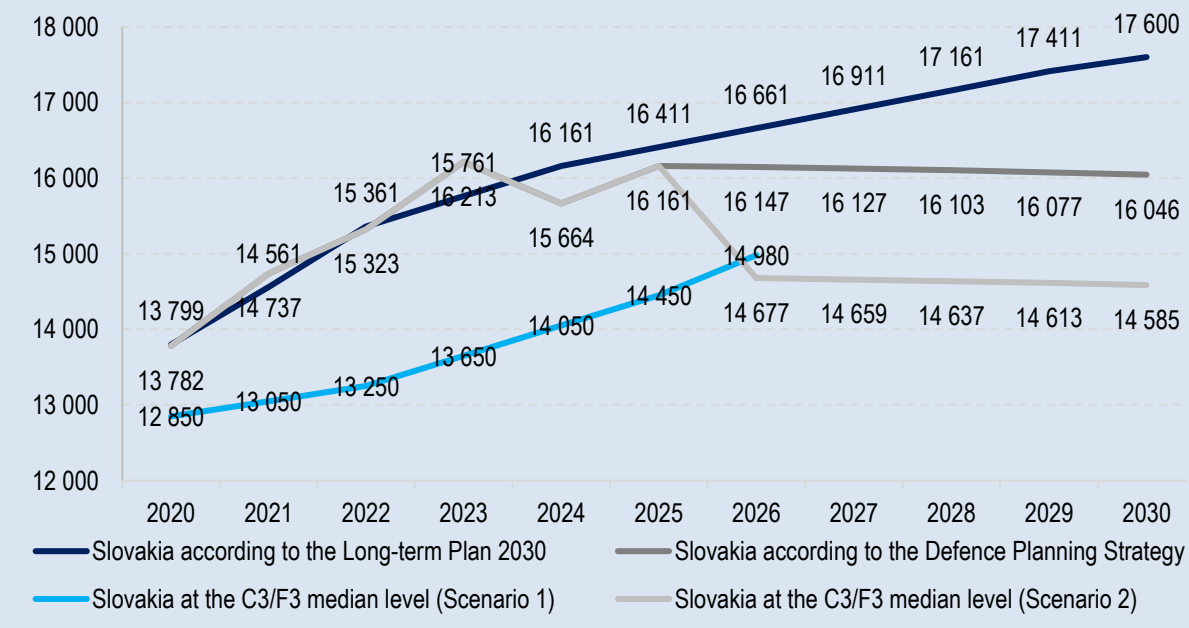
Compared to the reference countries, the growth of the number of soldiers to 17,600 by 2030 foreseen in the Long-Term Plan 2030 seems overrated and insufficiently substantiated. Expectations are that the 2021 NATO Capability Targets will not put an emphasis on higher planned numbers of soldiers but on improved materiel equipment of armed forces and higher operational readiness of relevant units for deployment in high-intensity operations. This will necessitate increased investment in personnel, equipment, training and supplies (NATO, 2020a).

Because of the absence of a new Generic Force Structure (2035), it is impossible to assess the intended assignment of the additional military personnel. The planned increase in the number of soldiers could partially be explained by the requirement for establishing a heavy infantry brigade. Based on the Capability Targets 2017, the INF-H-BDE building plan foresees 4,950 professional soldiers (GS AFSR, 2018a). This means increase by approx. 800 soldiers in comparison to the 2013 Capability Targets (GS AFSR, 2018a). Clarification as to whether or not this additional number of soldiers is included in the increase of 5,000 soldiers provided for in the Long-Term Plan was not available to the MoF SR. This review recommends that until the Long-Term Plan 2030 is updated and a new fiscally sustainable Generic Force Structure (2035) is approved, the heavy infantry brigade should be fully staffed up to the level determined by NATO standards as priority and any further increase in the number of staff in the relevant units should be limited.

Box 9: Proportion of compensations in future expenditure

We deem the number of soldiers planned in the Long-Term Plan 2030, i.e. nearly 18,000 military personnel, to be unsubstantiated. Taking regard of the trend of the reference countries' median, this review projects the target number of soldiers in the AFSR to be between 15,000 (scenario 2, a moderate reduction) and 16,000 (scenario 1, stabilisation; Graph 14). Since only the Allies' intentions regarding future numbers and trends by 2025 are known (subject to classification), the projections by 2030 differ in the median trend assumptions. Scenario 1 assumes that the reference group's median will become stabilized (three soldiers per 1,000 of population) after 2025 and numbers of soldiers will change only as a function of Slovakia's population, which is decreasing. Scenario 2 assumes that the reference median will slightly drop after 2025, to the average of previous years (2020 - 2027, 2.7 soldiers per 1,000 of population).

Graph 14: Development scenarios of the number of soldiers of the AFSR by 2030

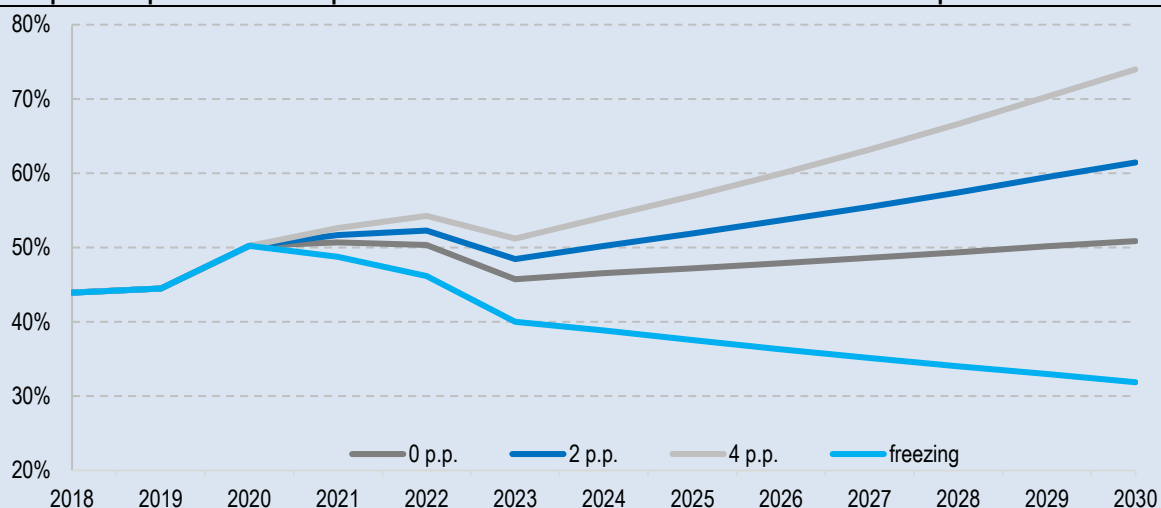


Note: Projections for the years 2024 and 2025, without Denmark because the country did not report data to NATO.

Source: Long-Term Plan 2030; Guidelines for Defence Planning of the Slovak Republic for Years 2021 - 2026, 2019; NATO, 2019c. Calculations: VfMD

A major rise in the number of soldiers could restrain the availability of funds which will be required, for extended periods, in order to improve the quality of capabilities and promote interoperability in accordance with NATO standards. Expectations are that the 2021 NATO Capability Targets package will not put an emphasis on extending the planned size of the AFSR but on their improved materiel equipment and higher operational readiness of the units already requested for full-fledged deployment in high-intensity operations, which will necessitate higher investment in personnel, equipment, training and supplies (NATO, 2020a).

Graph 15: Expenditure on compensations of AFSR soldiers as a share of MOD current expenditure



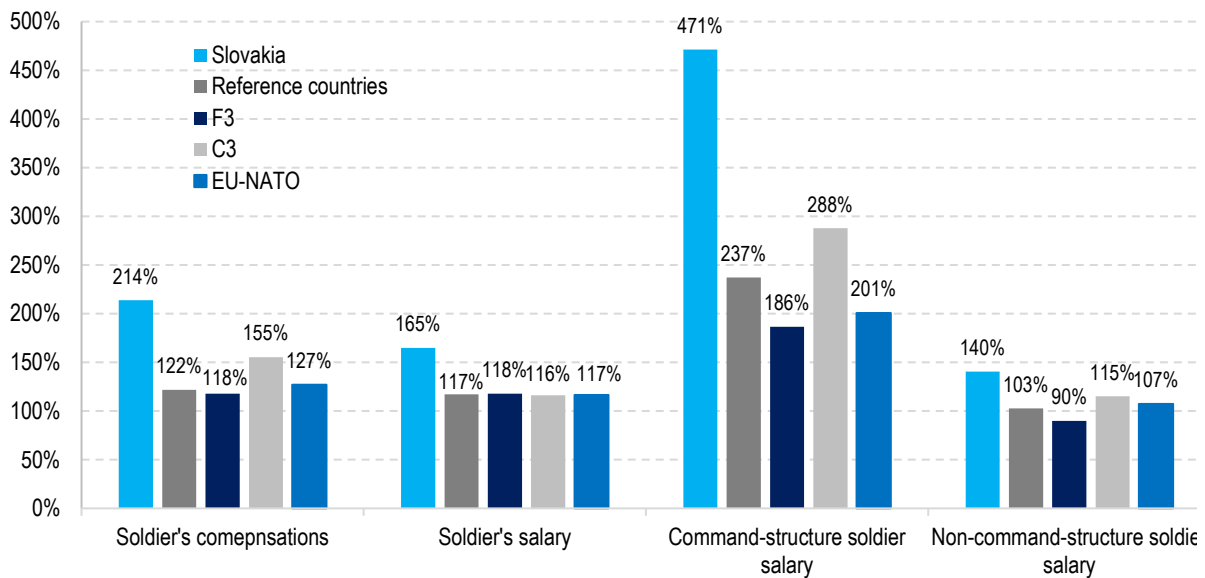
Note: The share is calculated as a function of increases in soldier compensations in excess of the wage growth rate in the economy (troop numbers based on the Long-Term Plan; VIMD estimates). The projection reflects the impact of the amended Act on the civil service of professional soldiers, effective from 1 February 2020, to the extent of the Budget Impact Assessment of the amended Act.

Source: BIS; MOD, 2017d; IFP, 2020; European Commission. Calculations: VIMD

Professional soldiers' pay related to the average wage in the economy is higher than the median of the reference countries. Based on data reported to NATO (NATO, 2020b), the AFSR soldiers earn about 165% of the average wage in the economy. The median of the founding group and the Central European group is 117% and the median of the EU-NATO countries is also 117%. The comparison disregards non-financial benefits for service in the army, such as moving/housing allowance, refund of tuition fees, provision of meals at works, early retirement pension, etc. The high total personnel expenditure amount results from the combination of salary amounts and an inadequate structure of the AFSR personnel in terms of age or the proportion between civilian and military employees. High salaries of military personnel in command structures are addressed in the Optimisation of Command Structures section.

This review recommends gradually equalizing non-command professional soldiers' pay relative to the average wage in the economy with the level of the reference countries. The alignment of the level of pay as a multiple of the average wage in the economy with the median would lead to reduction from current 1.7 to approx. 1.2. For soldiers outside command structures, this would mean a gradual decrease to 103% of average wage. The review estimates that the total saving potential of the equalisation of salaries with the reference median amounts to EUR 102 million (in 2020 prices).

Graph 16: Soldiers' compensations related to average wage - official NATO reports (2018)



Note: The comparison overviews all EU-NATO countries that reported data to NATO in the required structure, using median. The indications are actual figures of 2018 or, if not available, plans of the countries' Ministries of Defence. For Hungary, the indications are actual figures reported by its Ministry of Defence for 2017. Compensations include, besides all salary components, the employer's contributions to pension saving (headings 1.1.1 and 1.1.2 of the NATO defence expenditure nomenclature)

Source: NATO, 2020b; OECD; ECB as per NBS; Eurostat; Bulgarian National Statistical Institute; Romanian National Institute of Statistics; Croatian Presidency of the Council of the EU. Analysis: VfMD

The average gross pay of professional soldiers and civilian employees of the MOD grows at a higher rate than the average salary of other civil servants. It is nearly 50% higher than in 2015 (Graph 17 and Graph 19). Civil servants' or police officers' salaries rose by 35% on average in the same period and those of Slovak employees with a university degree by 13% by 2018.⁴⁷

A new military personnel remuneration system became effective in February 2020 under which salaries rose markedly, by 20%; this will amount to additional annual budget expenditure of nearly EUR 90 million. According to the Budget Impact Assessment, the increase could amount to 20%, with the average wage rising to EUR 2,000. Moreover, the Act has introduced a 1 % increase in a rank-related salary per year of civil service. The total income of soldiers is also influenced by retention allowances for housing, as soldiers are often required to change their place of work in accordance with the state's needs. The allowances amount to nearly one sixth of soldiers' income. The average soldier's monthly income of 2019 inclusive of such allowances was over EUR 2,000, which is 115% of the salary of employees with a university degree in the Slovak economy.

The average income of a soldier, reaching approx. EUR 2,300 per month in 2020, consists of a salary and a retention allowance.⁴⁸ It is 32% higher than the average salary of an employee with a university degree and 17% higher than the salary of a member of the Police Force. The retention allowance is paid to all soldiers, in the amount of EUR 320 outside Bratislava and EUR 390 in Bratislava.⁴⁹ It is an example of pay differentiation of employees depending on the place of work, as proposed by the Spending Review of Remuneration and Employment (MoF SR, 2020). Professional soldiers are required to change the location of their civil service according to their civil service office's needs. The retention allowance is, however, received by all soldiers irrespective of whether or not they work in a place other than their habitual place of residence. According to a study prepared by the MOD's Analytical Unit (AU, 2019a), this benefit is a form of incentive to attract and retain

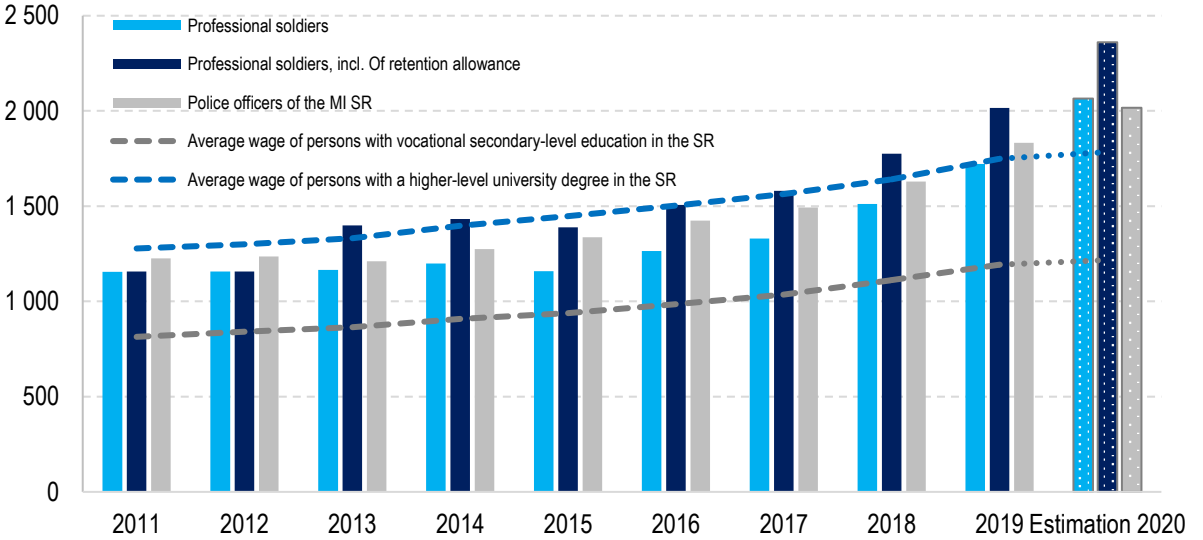
⁴⁷ Data concerning average wage by education for 2019 are not yet available.

⁴⁸ For details refer to Section 190 of the Act No. 2015/2004 on the civil service of professional soldiers.

⁴⁹ In specific cases involving the provision of government housing, a half of the retention allowance is paid.

professional soldiers. The retention allowance replaced the former housing allowance intended to compensate housing expenses.

Graph 17: Average professional soldiers' gross pay and comparison with other employees



Note: Average wages by education for 2019 estimated by VfMD; official data is not yet available. Source: BIS; MoF SR; VfMD

The pay of a professional soldier consist of a rank salary, additions for years of civil service, various extra-pay items, allowances and benefits. A rank salary is a combination of a rank-related component and a position-related component, i.e. it reflects the rank (lieutenant, captain, major) and the position (hundreds of positions, such as mechanic, division commander or senior explosive technician). Operating airmen,⁵⁰ paratroopers, military police officers or medical personnel members are automatically granted an extra pay for their profession. Extra pay and allowances are also afforded for, for example, work in an adverse environment or for work involving life or health hazard. Further, a professional soldier may receive a bonus up to the amount of his/her rank-related salary. Based on MoF SR's data of 2017, extra pay and bonuses amounted only to 3% of compensations paid to soldiers, i.e. differences in remuneration are practically wholly attributable to rank-related salary. For police officers, as an example, extra pay and bonuses constituted 25% and 5%, respectively, of remuneration in 2016.

Compared to civilian employees, professional soldiers are subject to limitations on certain fundamental constitutional rights and to stricter hiring conditions. Soldiers are not allowed to conduct business or carry out other earning activity, be members of political parties or actively participate in gatherings organised by political parties. Their right to petition is limited; they have no right to strike or associate in trade unions. Their family lives are affected by the obligation to perform their service in such place as the AFSR needs.

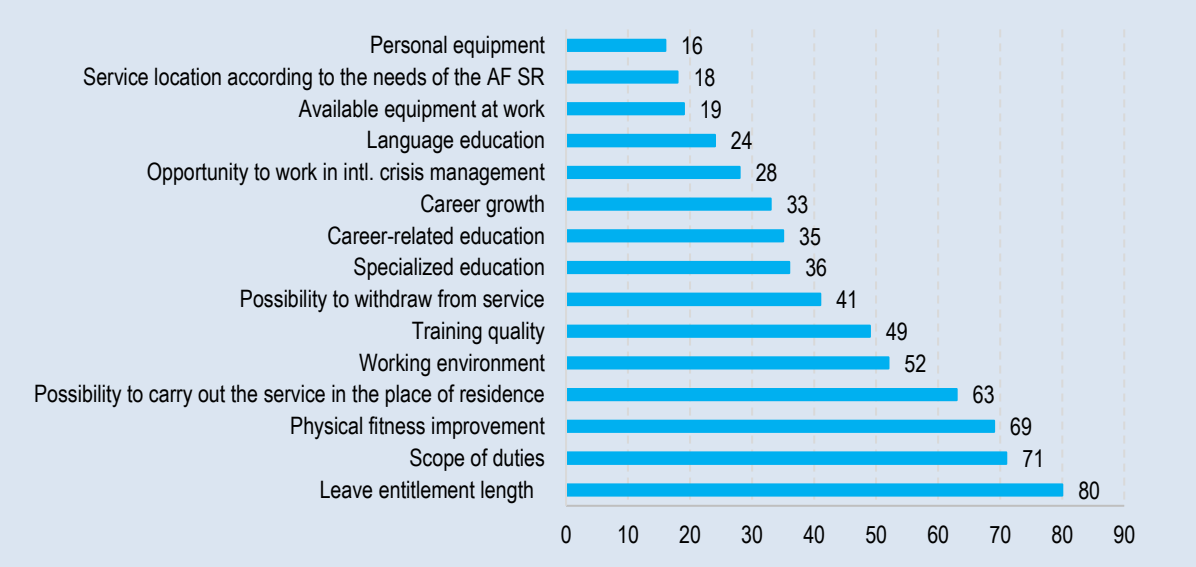
In consideration of the difficulty of their service and limitation of their rights, soldiers are afforded certain benefits, the most significant of them being the currently generous retirement benefit system and extended leave entitlements. Soldiers' statutory leave entitlement is seven weeks, more than ordinary employees. This entitlement is even longer, by at least six days, for soldiers performing risk-involving work or working in extremely adverse environments. Soldiers are also entitled to recovery stays which are treated as a service trip. The retirement benefit system is examined in a greater detail in sub-chapter 4.2 Retirement Benefit System.

⁵⁰ According to the Act No 281/2015 on the civil service of professional soldiers, an operating airman is a soldier performing specialized civil service as a pilot, flying navigator, airborne aviation specialist or flight engineer or flight technician.

Box 10: Survey of soldiers' work satisfaction

According to the survey of 2017 (AU, 2019a)⁵¹, soldiers are dissatisfied with equipment and with the obligation to work in such place as the AFSR require. On the contrary, they are particularly satisfied with the leave entitlement. The survey also indicates a high degree of dissatisfaction with the access to education, including in languages, career-specific and specialized skills. Only a half of soldiers is satisfied with the quality of training.

Graph 18: Soldiers' satisfaction with the individual aspects of their work



Source: MOD, 2017c

Based on the satisfaction survey, the Analytical Unit of the MOD elaborated an analysis of non-financial incentives for professional soldiers. Recommendations resulting from the survey analysis include the following:

1. Reconsider the point-based personal equipment procurement system.
2. Prepare alternatives to the accommodation policy and system.
3. Consider establishing a rotation system based on ranks/specialisations.
4. Establish a support programme to help soldiers' spouses to find job and to assist families in the adaptation process after the relocation of a soldier.
5. Identify reasons behind the low level of professional soldiers' language skills.

Increasing military personnel's pay may have a positive impact on recruiting and retention, but it may not be the most effective approach. Non-financial benefits have a potential to improve the perceived military service conditions; however, their international benchmarking is not possible at present. This review recommends making a comparative analysis of the non-financial benefits available to military personnel and their effects on recruiting and retention.

Surveys suggest that non-financial incentives play an important role in defence and in other sectors as well. Slovak soldiers are particularly dissatisfied with personal as well as technical equipment, the obligation to work in any place as the AFSR may need, and education and training quality (AU, 2019a, Box 10).

⁵¹ The survey was carried out by the Human Resources Department of the MOD. The survey sample (585 respondents on average with 95% return rate) was adequate to the purposes of the survey. The survey measured areas of life satisfaction of professional soldiers and grouped them into categories based on similarity. The sample was chosen with a view to being representative of the structure of the population of professional soldiers in terms of gender, rank and organizational unit. Professional soldiers joined the survey on a voluntary basis. They were first asked to answer general questions, followed by specific questions formulated by the authority which ordered the survey; respondents were given the opportunity to include comments on issues they deemed important.

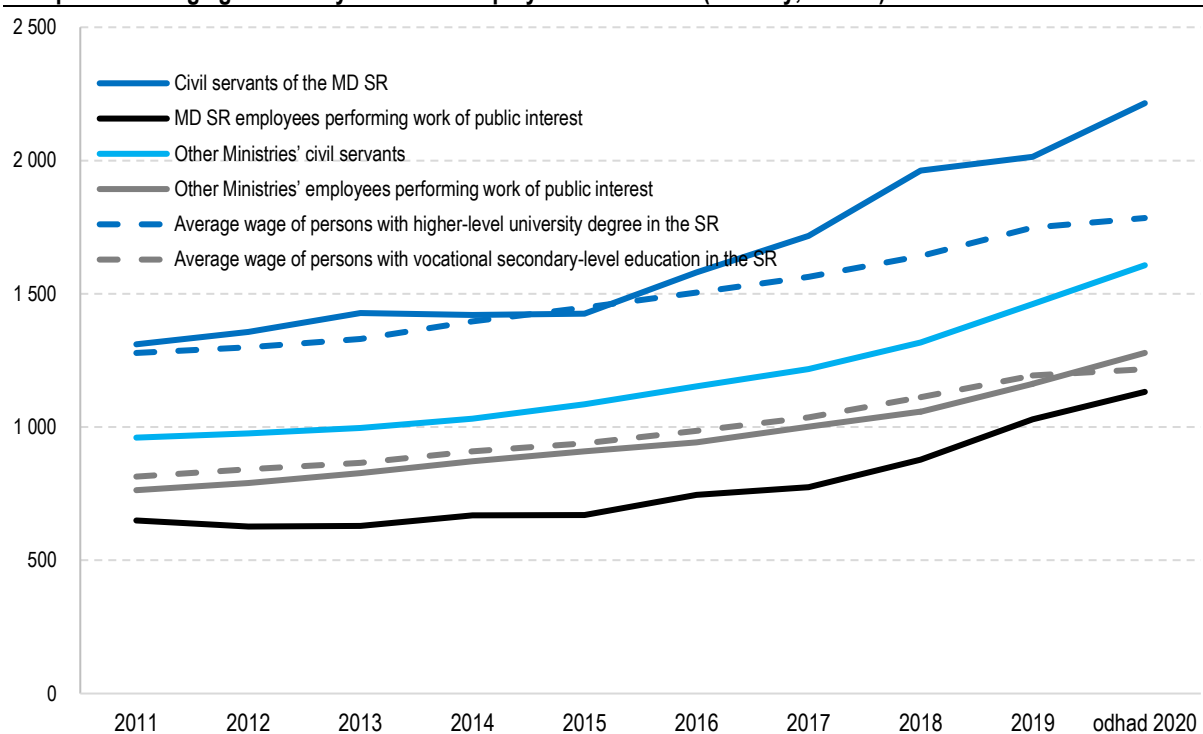
Civilian personnel in defence

About one third of defence personnel is civilian employees. In addition to the office personnel of the MOD Office, they include subordinated organisations' employees and the civilian personnel performing support activities for the Armed Forces, such as guard and sentry, supply, IT support, human resource management and other office work. Details of the AFSR's civilian personnel structure were not available to the MoF SR.

Salaries of the Ministry of Defence's civil servants are among the highest; their growth rate in the years 2015 to 2018 was twice as high as those of other Ministries. In 2019, the growth was lower. Until 2015, gross salaries of civil servants employed with the MOD (mainly office staff working at the MOD Office) was at about the level of employees with a university degree in the economy; salaries had grown rapidly since 2016 and reached approx. 115% of the average of employees with a university degree in 2019. The average salary level was thus the second highest, following the Ministry of Foreign Affairs where, however, the average of salaries is influenced by salaries received by seconded personnel.

On the other hand, the MOD personnel performing work of public interest receive the second lowest pay across the state budget chapters. Public-interest employees (performing meal service, cleaning or support works) receive wages at the level of approx. 85% of employees with full vocational secondary-level education in the Slovak economy and other Ministries' public servants. However, their gross pay has increased by over 50% in the recent years since 2015, growing faster than salaries of other Ministries' public servants. The salary growth rate of other Ministries was at about a half level.

Graph 19: Average gross salary of civilian employees of the MOD (monthly, in EUR)



Note: Average wages by education for 2019 estimated by VfMD; official data is not yet available.

Source: BIS; MoF SR

Differences in the remuneration of similar employees across Ministries may be attributable to poor coordination of the government's human resource management, as suggested by the Spending Review of Remuneration and Employment in Public Administration (MoF SR, 2020).

The key measure proposed by the spending review of the public wage bill is reducing the number of central government employees by 10%. Optimisation audits carried out with the use of the state's internal capacities serve as an instrument to achieve that goal. The overall saving target is below the potential identified by the audits already performed (audits of state-run enterprises and the Government Office of the SR, or older audits of the MoF SR, MOD and MC SR), which amounts to 20% of compensation expenditure. The MOD budget chapter for 2020 foresees personnel expenditure on civil servants and public servants (except soldiers) in the amount of EUR 123 million. The estimated saving potential is thus EUR 12.3 million; this includes saving on support activities proposed by the review. Over one third of the saving may be spent on severance payments; the measure may at the same time impact special account revenue and expenditure.

The Spending Review of Remuneration and Employment in Public Administration identified a potential for reducing costs of support services provided to the MOD ranging between EUR 1.3 and 2.7 million annually.⁵² The Ministry's Office and its budgetary and subsidiary organisations spend around EUR 8 million per year on support and cross-cutting activities (such as registration of contracts and agreements, back-office support; the sum includes both internal and external costs, inclusive of non-employment work arrangements). One in five employees works in this area. The high variability of expenditure on support and cross-cutting activities and their similarity across the Ministry and its subordinated organisations suggest a potential for optimizing costs of such services. Three approaches have been identified which are mutually complementary:

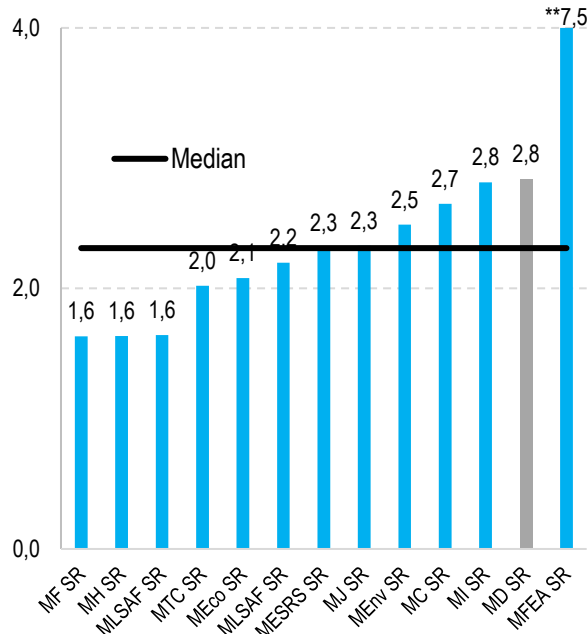
1. Optimisation of support and cross-cutting activities with the current organisation design retained (EUR 1.3 million)
2. Centralisation of support and cross-cutting activities in Ministries' service centres (EUR 1.6 million)
3. Setting up of the government's shared support and cross-cutting activity centres (EUR 2.7 million)

The support optimisation option requires further analysis. Feasible ways to achieve savings may be particularized through a more detailed optimisation audit. One example of successful optimisation of support activities is the already implemented centralisation of the Ministry of Defence's financial management offices. In addition to cost reduction, it has also led to reduced financial reporting error rates.

The Ministry of Defence's civil service candidate selections are the second most competitive. In 2017 to 2019, the average number of applicants in external candidate selections for ordinary personnel was 2.8, which puts the Ministry in the second place, after the MFEA SR. The average number of applicants participating in candidate selections for managerial positions was 1.6, which is slightly below the median of the other Ministries. The competitiveness of civil service candidate selections is low at other Ministries, too (VfMD, 2020). Approximately one third of external candidate selections for ordinary positions and one fifth of selections for managerial positions at the Ministry of Defence ends without success, i.e. no candidate is selected. Compared to other Ministries, the MOD is less successful in staffing positions with its own internal employees. While other Ministries staff one third of vacancies, on average, with internal personnel, the Ministry of Defence's rate is only one tenth.

⁵² The saving is considered at the potential level identified by the optimisation audits. It is quantified on the basis of 2020 prices; measured at 2017 prices, the saving amount is between EUR 1.1 and 2.3 million.

Graph 20: Average participation rates of external candidate selections*, ordinary positions (2017 – 2019)

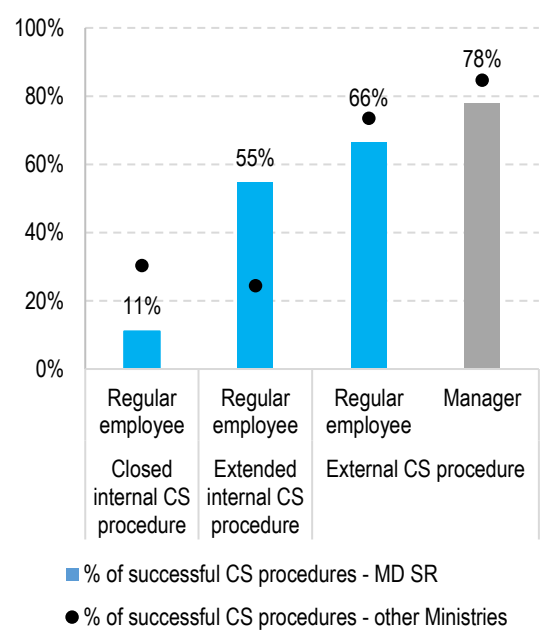


* CS with at least one participant

Source: VfMD

** The graph height is reduced for the sake of clarity

Graph 21: Success rate of candidate selections (2017 – 2019)



*Only 11 extended internal CS were reported by the Ministry in the period concerned

Source: VfMD

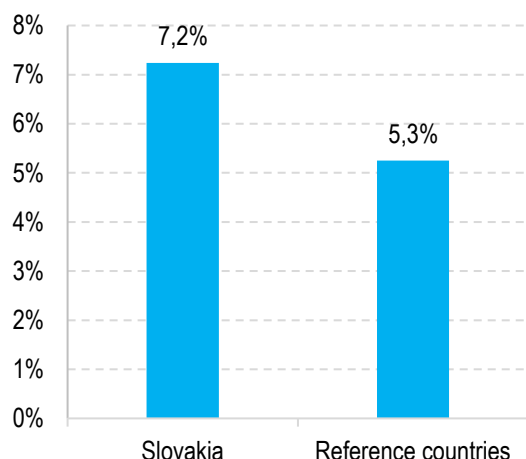
This review recommends carrying out a personnel and process audit of the Ministry of Defence’s support and back-office units, including subordinated entities and AFSR facilities. The proportionality of the Ministry’s and the Armed Forces’ divisions relative to the AFSR’s needs and substantiation of certain tasks undertaken without direct relation to Capability Targets should be reviewed.

Optimisation of command structures

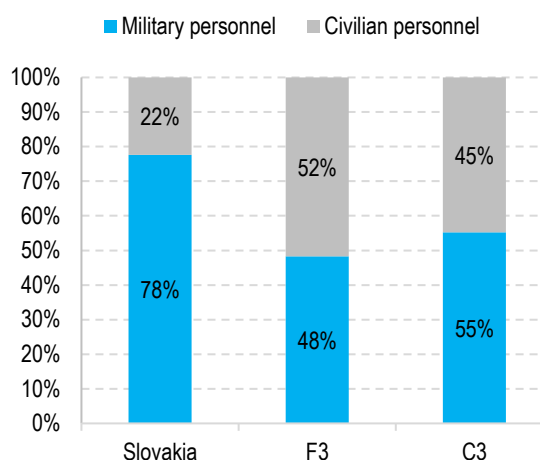
Optimisation of command structures to the reference groups’ median could deliver 27% reduction in numbers of employees and, consequently, personnel expenditure saving of EUR 77 million. According to the MOD data, the AFSR command structures exceed in numbers the medians of both the founding and Central European reference group countries, and salaries of civilian personnel as well as military personnel seem to be markedly overvalued. International partners use civilian personnel in command and control structures to much larger extent.

Reducing the numbers of personnel in command and control of the AFSR to the median of the reference countries and adjusting the proportions of civilian and military personnel would lead to reduction of the number of professional soldiers by 465, while the number of public-interest employees would rise by 146. In 2018, 1,160 persons worked in the command and managements structures of the AFSR, including 900 military personnel and 260 civilian personnel members (NATO, 2020b). Compared to the median of the reference countries where command structures make up approx. 5% of armed forces, Slovakia’s rate is 7%. Moreover, three quarters of command structures are staffed by military personnel, while the median of the reference countries is slightly more than a half. Aligning the personnel numbers and structures with the median of the reference countries would lead not only to reduced personnel numbers, but also to an increased proportion of civilians in command structures.

Graph 22: Proportion of command structures relative to the size of armed forces



Graph 23: Proportions of civilian and military personnel in the command and control structures of armed forces (2018)

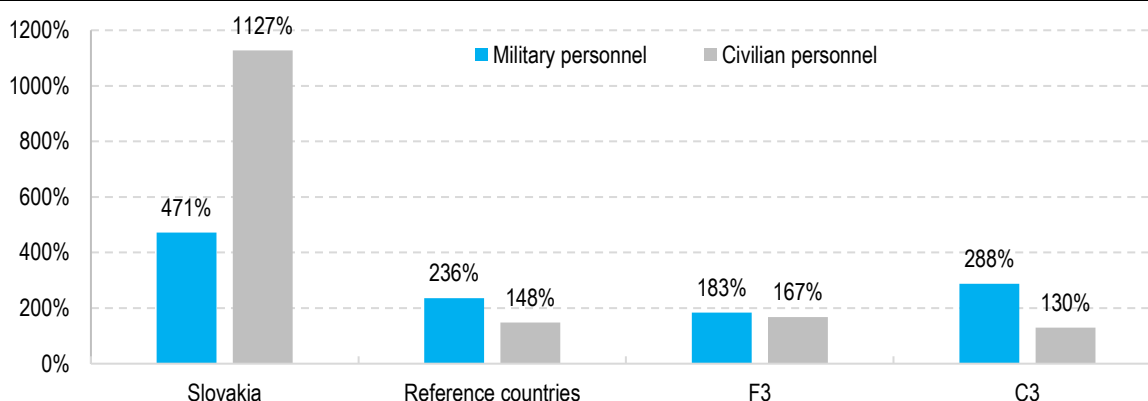


Note: For Belgium and Lithuania, the indications are plans of their Ministries of Defence for 2018. For Hungary, the indications are actual figures reported by its Ministry of Defence for 2017; data for 2018 were not reported with a sufficient level of detail.

Source: NATO, 2020b. Analysis: VIMD

Adjustment of salaries of command structures, in proportion to the average wage, to the median of the reference countries, combined with modification of the structures and personnel, could save up to EUR 77 million annually. Based on data reported to NATO (NATO, 2020b), the AFSR command structures' level of pay is markedly higher than the reference countries. This applies to both civilian and military personnel. The alignment of the level of pay as a multiple of the average wage in the economy to the median of the reference countries would result in reduction to approx. 2.4 for military personnel⁵³ and 1.5 for civilian personnel.⁵⁴ The quality of data varies across the countries, with some of them, Slovakia included, reporting unlikely high salaries in command structures. A more accurate comparison would require a more detailed analysis of data quality and the methodology used, as well as of the MOD's approach to the application of the NATO defence expenditure reporting methodology. Correction of the reporting to NATO will help to improve the international referencing of wages so as to support an appropriate set-up of the remuneration system.

Graph 24: Salaries of command structures related to the average wage in the economy, official reports to NATO (2018)



Note: Indications for the reference countries are median values. For Belgium and Lithuania, the indications are plans of their Ministries of Defence for 2018. For Hungary, the indications are actual figures reported by its Ministry of Defence for 2017; data for 2018 were not reported with a sufficient level of detail. Conversions were made using year-end FX rates of national currencies to EUR.

Source: NATO, 2020b; OECD; ECB as per NBS; Eurostat. Analysis: VIMD

⁵³ C.f. reported 471% of the average wage in the economy

⁵⁴ C.f. reported 1127 % of the average wage in the economy

The necessity of modification of the Armed Force's command structure is also endorsed in past reform plans of the MOD. Despite the recommendation to reduce the AFSR's command structures by about 15% in favour of combat units, as pronounced in the Strategic Defence Review, the optimisation potential has not be utilized. Implementation of the recommendations would enable the reduction of the General Staff of the Slovak Republic by 130 table positions and/or identification of possible savings at operational and tactical headquarters. The proportion of General Staff table personnel in the total AFSR personnel has not changed since 2011, remaining at 7%. The generic force structure developed in 2011 assumed a 38% reduction in the GS AFSR personnel, i.e. from 321 to 200 persons, including nearly 100 professional soldiers (MOD, 2011). Applied to present-day numbers, such change would now mean reduction from 353 to 220 table positions.⁵⁵ Data allowing referencing the current operational and tactical level structures to the baseline and the target envisaged in the Strategic Defence Review were not available to the MoF SR. A 15% overall reduction in the AFSR's command and control personnel at the strategic, operational and tactical levels was considered, which was supposed to be reflected in the draft generic force structure to the benefit of reinforcement of combat units (MOD, 2011).

This review recommends that expenditure on compensations for military and civilian personnel of command structures should not increase above the current amount and that AFSR command and control at strategic, operational and tactical levels should be redesigned as part of the new Generic Force Structure (2035) and the Long-Term Capability Development Plan. The changes should be supported by an optimisation audit. It is also advisable to consider possible lowering of ranks required for positions, as they may be a factor contributing to the high expenditure on salaries of command structures; the MoF SR does not have relevant, sufficiently detailed data. This review recommends validating the functioning of the new command and control structure of the AFSR, including in emergency situations and in reserve mobilisation, by way of a war game.

4.2. Retirement Benefit System

The retirement benefit system is temporarily in deficit and must be subsidized by the state (0.1% of GDP, i.e. EUR 90 million per year). From a long-term perspective, the Council for Budget Responsibility expects a deficit of 0.01% of GDP per year. A major portion of the current deficit is due to the reduction of the army which accompanied its professionalizing. The system change implemented in 2013 contributed to stabilisation of the system in a long-term horizon. Nevertheless, soldiers still receive more from the system than they put in it.

The retirement benefit system does not markedly deviate from those of the other EU Member States. Policemen, soldiers, firemen, rescuers and armed officers of the Financial Police each have their specific social security system. Such arrangement is normal in foreign countries, too, only some European countries (e.g. Hungary or Norway) have integrated policemen and soldiers into the general system. But soldiers and policemen of those countries still enjoy looser rules, in particular earlier retirement.

Present-day retirement benefit system

Police officers and soldiers pay higher old-age and retirement pension contributions than civilian employees. They make payments for fewer years and spend more years, on average, in retirement. Their

⁵⁵ The present table personnel numbers for all command and control levels of the AFSR total 1,384 professional soldiers and 328 public servants, making up 8.4% of the total AFSR headcount. Considered operational-level structures include commands of land forces, air forces and special operation forces. Considered tactical level structures include commands of the 1st and 2nd mechanised brigades, the combat security service brigade, the air operation command brigade, the tactical, helicopter and transport wings and the anti-aircraft missile brigade. Command structures of other divisions of the AFSR like regiments, battalions, bases etc. were not considered. Table numbers taken from GS AFSR, 2018c

benefit ratio is higher than that of civilian employees with a similar length of career. After 25 years worked, which was the average length of service of retirees in 2018, they receive 55% of the assessment base amount. Civilians with an average wage would receive after 25 years a pension corresponding to approx. 38% of their average wage for the last 10 years.

Table 28: Average values of parameters for new retirees

Average values	Police officers			Soldiers			Civilians
	2012	2015	2018	2012	2015	2018	2018
Age of entry into service	22.9	23.9	24.0	18.7	20.9	19.7	N/A
Years of service	23.0	23.8	25.7	21.1	21.7	24.4	42.6
Retirement age	45.8	47.7	49.7	39.8	42.7	44.1	61.8
Life expectancy in retirement	34.9	32.9	30.9	41.4	38.3	36.7	21.1
Initial benefit ratio	49%	51%	56%	43%	45%	53%	51 %*
Old-age pension	631	655	697	794	805	801	516

*relative to the average wage in the economy of 2018

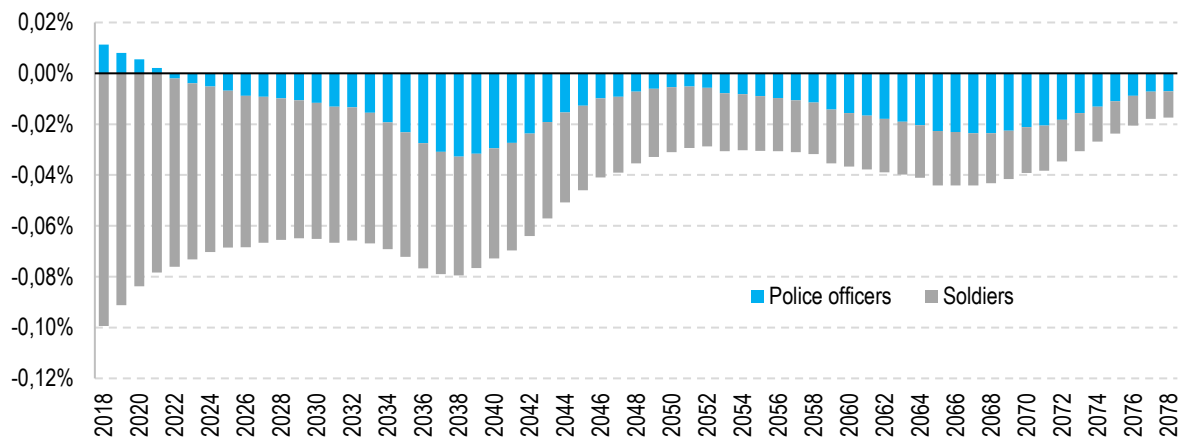
Sources: calculations of IFP; CBR

The parametric changes of 2013, in particular modification of the length of services and of the benefit ratio, made a substantial contribution to stabilizing the retirement benefit systems in a long-term horizon. The minimum length of service gradually extends from 15 to 25 years, including with retroactive application to those who entered into service before the start of the reform. The benefit ratio has been reduced substantially for new police officers and soldiers: they will receive 37.5% of their assessment base after 25 years served. The determination of the assessment base has also changed: the average instead of the best one of the last ten years is used. The impact of those changes will be visible only after 2038 when police officers and soldiers who entered into service after 1 May 2013 will start to retire. Details of the changes are summarized in Box 11.

The retirement benefit system for soldiers and police officers will remain in a moderate deficit from a long-term perspective. According to the CBR's projections, the deficit of the system for soldiers will be several times higher than the system for police officers in a near future.⁵⁶ The soldiers' retirement benefit system is presently subsidized with approx. EUR 90 million (0.1% of GDP) annually. The deficit is expected to stabilise over time at approx. 0.1% of GDP. A major portion of the current deficit is attributable to the reduction of the army due to its professionalizing, and it will decrease over time. The police officers' account is now in a moderate deficit, but from a long-term perspective, the CBR supposes a cyclical development with deficits not exceeding 0.025% of GDP. The irregular development is partially due to the reform which defers a part of planned retirements to a later time.

⁵⁶ For simplification, the system for police officers, firemen, maintain rescuers and armed officers of the Police Force is also referred to as police officers' retirement benefit system, but it covers all the above professions. The soldiers' retirement benefit system has its own specific account.

Graph 25: Deficit of the police retirement benefit systems for police officers and soldiers (% of GDP, CBR forecast by 2078)



Note: Calculation details are provided in Annex 5

Sources: Calculations of CBR

According to the CBR's calculations, soldiers who entered into service after 1 May 2013 will receive slightly more than they put in the system; for police officers, the ratio is near to fair. Depending on the discount rate applied and the number of years served, "actuarially fair"⁵⁷ premium rates for police officers would be between 24% and 34%, and for soldiers between 27% and 37%. A civilian with an average wage and an average number of years worked (41) should pay social insurance premiums between 15% and 21%. Fair premium rates are sensitive to the effective interest rate and the sensitivity rises with the years of receiving benefits (soldiers). Details of the calculations and assumptions employed are provided in Annex 5.

Table 29: Actuarially fair premium rates and benefit ratio of the last pay

Years served	Police officer		Soldier		Civilian
	25 years	30 years	25 years	30 years	
r = 2%	34%	32%	39%	37%	21%
r = 3%	26%	24%	29%	27%	15%
Premium rate on gross pay	27%	27%	27%	27%	23%
Benefit ratio of last pay	35%	44%	34%	44%	50%

Sources: Calculations of CBR

Where the system set-up is such that the real value of future pensions is higher on average than premiums paid, it is advisable to communicate this as an employee benefit. Such a situation existed in the system before the reform of 2013: according to the IFP analysis (IFP, 2012) fair premium rates for police officers, based on the average of years served, were nearly 60% for police officers and even around 70% for soldiers. After the change of the system, the retirement benefit system still remains an employee benefit, in particular for soldiers. The system and parameters of retirement pensions should be subjected to analysis and comparison with other benefits or higher wages within the framework of the Slovak pension system reform.

CBR's simulations suggest that the actual benefit ratio of the last pay will be lower in soldiers and police officers than civilian employees. This is a cost of the shorter premium payment time and longer pension receiving time compared to civilians. For soldiers in particular, who would be more expected to retire after 25 years of service,

⁵⁷ An actuarially fair rate is a rate with which the amount of deferred funds is equal to the expected amounts to be received in retirement. It depends on the expected benefit ratio, expected saving time and life expectancy, but also the effective interest rate at which funds are appreciated.

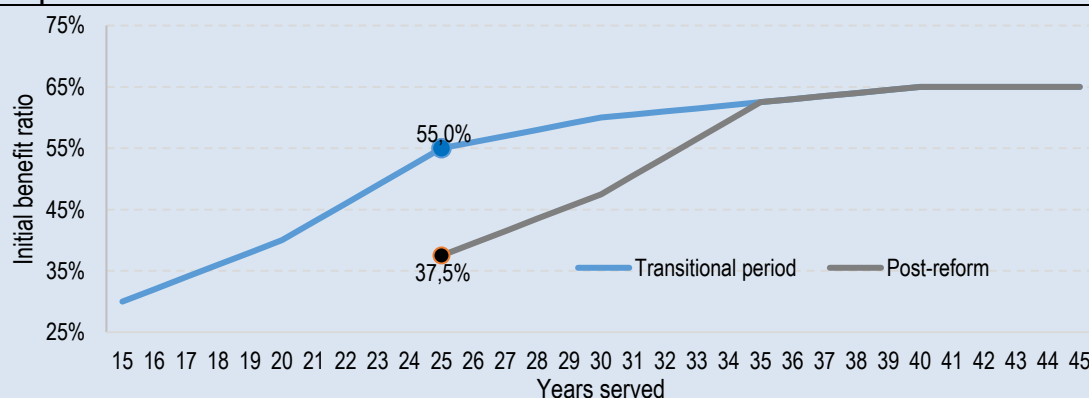
with a benefit ratio of approx. one third of their last pay,⁵⁸ extended life expectancy and a relatively low age at the time of retirement, the major challenge will be finding ways of support to encourage them to take on a new job.

Box 11: Changes in the retirement benefit system for public security forces in effect from 1 May 2013

Effective from 1 May 2013, the amendment to the Act No 328/2002 on social security of police officers and soldiers launched an important **parametric reform** with a positive effect on the sustainability of the retirement benefit system. The most important measures include the following:

- Introduction of **gradual extension of the time of service** required for the entitlement to retirement pension from **initial 15 years to 25 years**. The change applies only to police officers and soldiers who had not met the minimum 15 year requirement until 1 May 2013.
- **For all hires entering into service after 1 May 2013, the benefit ratio (BR)** was redesigned and the minimum benefit ratio (after 25 years of service) was set to 37.5% of the assessment base (**Chyba! Nenašiel sa žiaden zdroj odkazov.**). BR rises with the length of service, up to 65% of the assessment base (**Chyba! Nenašiel sa žiaden zdroj odkazov.**).
- Transitional higher benefit ratios apply to all police officers or soldiers who started their service before 1 May 2013 and ended the service after 1 May 2013.
- The assessment base for the determination of retirement benefits⁵⁹ has gradually **changed from the best year to the average of the last 10 years**.
- The retirement pension indexation method was changed and the approach used in the general pension system, i.e. indexation by the inflation index measured in pensioners' households, was supposed to start to apply from 1 June 2018. In the meantime, however, the provision was amended and now retirement pensions are subject to increase depending on the average old-age pension paid by the Social Security Fund and the length of the recipient's service. This is, however, a transitional provision only and starting from 2022, retirement pensions will be subject to the same increase as pension in the general system.
- With effect from 1 May 2019, the obligation to provide retirement grants and death benefits has been transferred from the special account to the budget chapter of the last employer.
- The minimum required length of service for eligibility to retirement allowance is subject to gradual increase from 5 years to 10 years and the amount of the allowance increases by 1% (in contrast to the rate of 2% applicable before the reform) of the assessment base per year served after 1 May 2013. Also, conditions for the determination of the duration of payment of retirement allowance have changed.
- **Premium rates of retirement pension insurance increased from 17% to 20% for employers and from 5% to 7% for employees.**

Graph 26: Benefit ratios before and after the reform



Source: VfMD, based on legislation in force

⁵⁸ After 25 years, it will amount to 37.5% of the average for the last 10 years, which is estimated at approx. one third of the last pay.

⁵⁹ Retirement benefits refer to retirement pension benefits, retirement allowances, retirement grants and death benefits.

Box 12: Retirement benefit systems for police officers and soldiers in the EU Member States

In most countries of the EU police officers and soldiers are covered by a specific social security system. Even in countries where they are integrated into the general system, these professions enjoy looser rules, particularly as regards retirement age. While many experts recommend integrating those employees into a single pension system as a way to support employees' mobility between professions and enhance fairness, such reforms are difficult to implement; as an example, Poland and Romania returned to the former segregated system after several years.

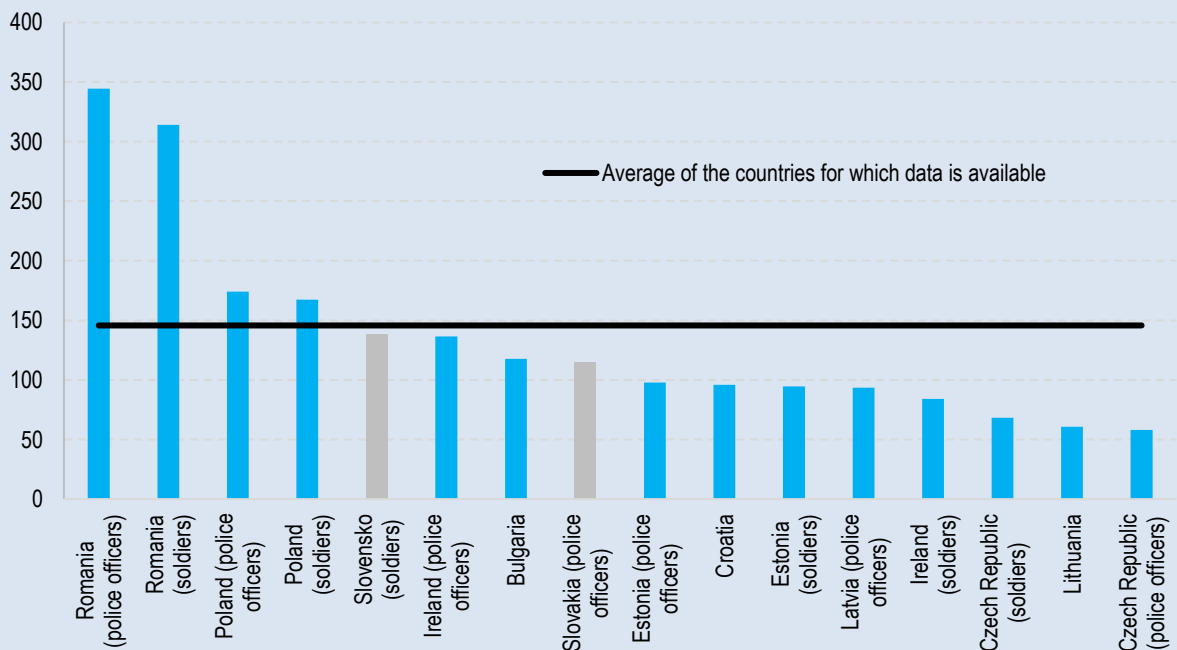
Slovakia belongs to a minority of countries which have not set a minimum age for retirement from civil service. In most countries, the lowest age for civil service retirement is between 50 and 60 years, with some having exceptions for certain professions (pilots or submarine crews) or a system of reducing the age with a longer time of service. In general, civil service retirement age is about 10 years lower than the retirement age in the general system. While eligibility to retirement pension arises after 20 or 25 years of service in those countries, the pay-out of retirement pension benefits is deferred until the minimum age is reached.

After the reform, the minimum length of service in Slovakia will be set to a level equal to or higher than the EU standard. The most usual minimum limit in the EU is 25 years of service, while countries apply various exceptions, or allow earlier retirement with reduced retirement benefits. Slovakia is now in a transition period: the length of service required until 2013 was 15 years, but it is gradually increasing now to reach 25 years.

Large differences exist between countries in the benefit ratio offered by the retirement benefit system. The differences lie in the assessment base from which the pension is calculated (ranging from the last years' pay to the average pay for all career) as well as the percentage of the base a retiree receives. After the reform, Slovakia's minimum benefit ratio will be 37.5%, less than is common in the EU countries (usually around 50%). The maximum mostly ranges between 60% and 85%. Because of the large differences in terms of the benefit ratio, assessment base as well as the time during which retirement pensions are received, it is rather difficult to benchmark the "generosity" of a system.

Slovakia belongs to the countries, mostly Central-European and East-European ones, which provide higher retirement pensions, when related to the median income of households. According to the World Bank's survey, retirement pensions paid to Slovak soldiers in 2016 were higher than the median income, amounting to 138% for soldiers and 114% for police officers. The same indicator for 2018 suggests a reduction to 130% for soldiers and only a minimum decrease to 112% for police officers.

Graph 27: Retirement pension related to a country's median income (2016)

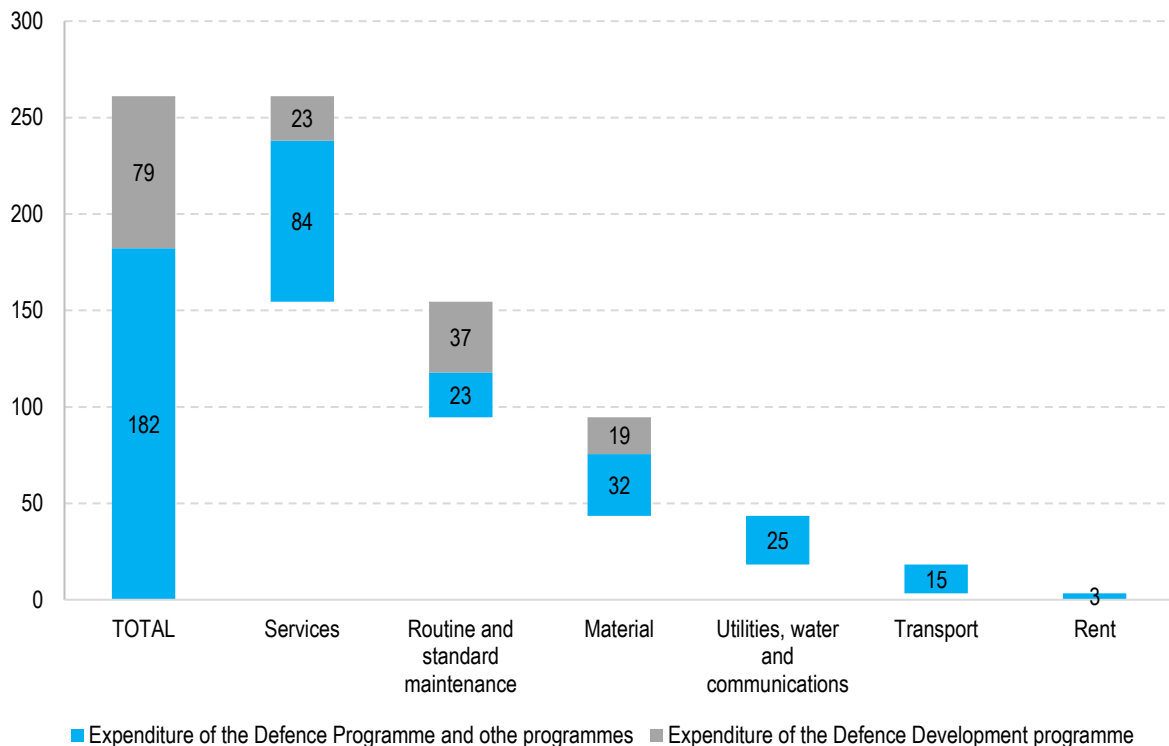


Source: World Bank analysis

4.3. Goods and Services

Expenditure on goods and services amounts to nearly one third of the Ministry's expenditure. The MOD expenditure on goods and services is the second highest of all budget chapters, following the Ministry of Interior. In 2016 - 2019, the amounts of expenditure reported to NATO could have been higher by EUR 261 million per year on average. Out of the total expenditure on goods and services, services amount to over 40% (EUR 107 million), maintenance to 23% (EUR 60 million) and material to 20% (EUR 51 million). One third of expenditure on goods and services was funded from the Defence Development programme; this includes expenditure on the purchase of new military equipment.

Graph 28: Structure of expenditure on goods and services (2016 – 2019, in EUR million)



Source: BIS; MoF SR

The Ministry's highest spending was on special services, machinery maintenance and energy. The MOD paid EUR 75 million annually for outsourced special services. This includes, for example, safeguarding of facilities, legal and advisory services, instrument calibration and equipment assessments. The highest special services item was costs related to the Military Intelligence, while it is impossible to further particularise the spending because of unavailability of data. Machinery and equipment maintenance cost on average EUR 45 million per years; one quarter of the maintenance spending was on air defence.⁶⁰ Expenditure on utilities amounted annually to EUR 19 million in 2016 - 2019. This amount includes expenditure on electricity (EUR 8 million), gas (EUR 6 million) and heat (EUR 3 million).

⁶⁰ Maintenance expenditure also includes expenses incurred under the service contract for the operation of MiG-29 aircraft.

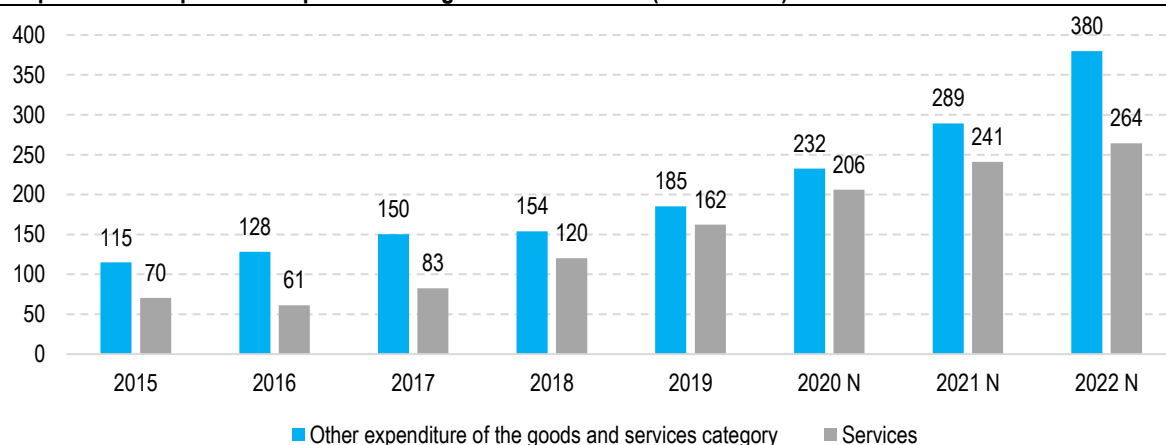
Table 30: Most relevant categories of goods and services (in EUR million)

Category	Expenditure amount	2016	2017	2018	2019	Average for 2016 – 2019
Services	Special services	46.4	56.3	92.4	105.5	75.2
Routine and standard maintenance	Maintenance of special machines, apparatuses, devices, equipment and tools	38.5	47.0	38.7	55.8	45.0
Utilities	Utilities	18.2	18.8	19.6	20.4	19.3
Services	Education events and courses, seminars, meetings, conferences, symposiums	1.7	11.5	7.4	37.5	14.5
Material	General material	7.6	8.3	17.7	17.6	12.8
Material	Special machines, apparatuses, devices, equipment and tools	5.6	20.0	1.5	17.7	11.2
Material	Working clothes, footwear and working aids	8.0	7.9	13.8	12.5	10.5
Material	Special material	6.4	7.6	19.2	3.7	9.2
Transport	Fuels, greases and lubricants, oils and special fluids	10.1	4.9	6.9	6.3	7.0
Services	Refund of costs of economic mobilisation and intervention supplies	5.4	7.3	6.4	3.2	5.6
-	Other goods and services	41.6	43.4	50.8	67.4	50.8
-	TOTAL goods and services	189.4	232.9	274.3	347.6	261.1

* Expenditures in bold are those with over 50% funding from the Defence Development programme

Source: BIS; MoF SR

Since 2015, expenditure on goods and services has grown twice as fast as other current expenditure, with service expenditure increasing the most. The major contributor to the increase in expenditure was special services, which have risen by EUR 53 million (99%) since 2015. In 2020 - 2022, the Ministry plans to increase primarily its spending on special services (by EUR 132 million in 2022) and special materiel (by EUR 55 million in 2022).

Graph 29: Development of expenditure on goods and services (EUR million)

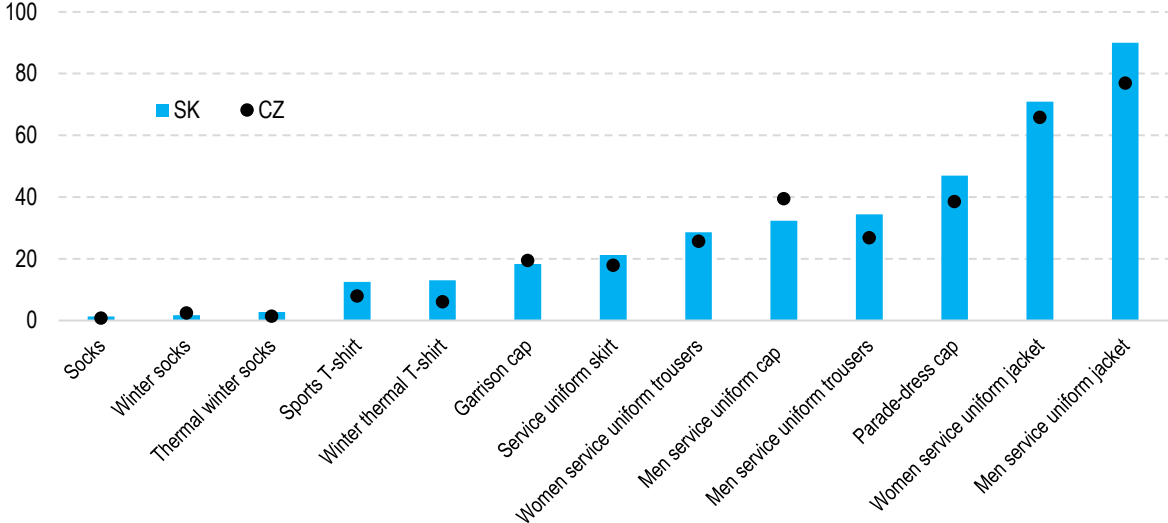
Source: BIS; MoF SR

With better procurement of soldiers' attire, the MOD could have saved approx. EUR 170 thousand (3.9%) per year. In 2019, the MOD entered into four-year framework agreements for the purchase of uniforms in the value of EUR 16.2 million (CRC, 2019a – 2019e). Comparison of unit prices with the Czech Republic indicates that the MOD's purchases of some uniform components were more expensive. During the four-year term, the Ministry could

have saved EUR 670 thousand⁶¹ (4%) on the purchase of uniforms if costs at the level of those of the Czech Republic were contracted.⁶²

The price of a Slovak soldier’s service uniform is higher by about one tenth than that of a Czech soldier. The service uniform of an ordinary soldier of the Slovak Republic (jacket, trousers and cap) costs EUR 157 net of VAT. The price of a comparable Czech uniform is EUR 143.

Graph 30: Uniforms of the AFSR: unit prices compared to the Army of the Czech Republic (2019, in EUR).



Source: VfMD based CBR data; CRC

Additional saving could be achieved through an improved personal equipment ordering system. The electronic personal equipment ordering system used in Finland eliminates soldiers’ trips to collect the goods and the associated travel expenses and absence from normal working duties on the trip day (SAO CR, 2019). A similar system is presently tested in the Czech Republic.

Further savings are achievable on general expenses, which were not mapped in detail within the framework of this review. Better procurement of goods and services is one of possible options; this review analysed in detail only 5% of relevant expenditure. The saving potential of other areas is to be quantified.

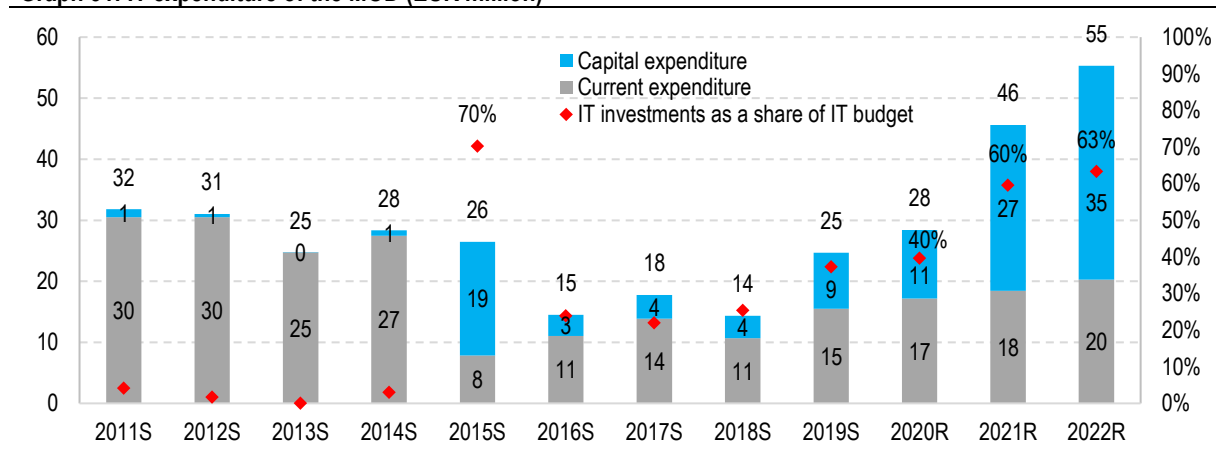
⁶¹ This saving would be achieved if the MOD made purchase contracts under the framework arrangements for prices at the maximum unit cost level.

⁶² Uniform components serving the same purpose were included in the comparison. The purchase contract terms and conditions are similar and unit prices are inclusive of transport, packaging and product quality check costs.

4.4. IT Expenditure

In 2011 to 2019, the average annual amount of IT expenditure of the Ministry of Defence was EUR 24.3 million. The IT budget is supposed to rise to EUR 55.3 million by 2022, which will rank the Ministry among those with the highest IT expenditure. In particular, investment expenditure is expected to grow from the average amount of EUR 4.6 million of 2011 - 2019 to EUR 24.5 million in 2020 - 2020 (i.e. from 21% to 54% of the IT budget). In the previous period, 21% of investment expenditure was co-financed from EU funds; starting from 2022, financing solely from the state budget is envisaged. On average, 90% of IT expenditure of this chapter is controlled by the Office of the Ministry of Defence.

Graph 31: IT expenditure of the MOD (EUR million)



Source: BIS; VfMD

Purchase and operation of telecommunications services and purchase of software remain the highest spending items over extended periods. This expenditure is expected to rise in the years 2020 to 2022 in connection with the implementation of investment projects. Cost effectiveness of purchases of standard products could be improved through unit price referencing and an appropriate set-up of supplementary services. The Informatisation Spending Review indicates that if optimized, expenditure on standard telecommunications services and infrastructure could be reduced by 10% to 30% (MoF SR, 2016). The VfMD's analysis suggests that discounts on listed prices in purchases of standard software range between 10% and 30%, with support possibly accounting for 50% of a unit price (VfMD, 2019). For service purchases, prices should be referenced against other, already existing contracts and customary discounts should be considered in purchases of standard equipment.

Table 31: Major expenditure items

Item	2015	2016	2017	2018	2019	2020	2021	2022	Total
Telecommunications goods and services	4.8	0.8	6.1	3.2	6.4	7.9	19.2	27.4	75.8
Purchased software	12.4	2.5	0.3	2.6	4.6	6.6	10.4	10.3	49.7
IS and SW maintenance and development	3.4	6.8	2.5	4.0	4.0	4.8	5.2	5.1	35.8
Proportion of the items in IT expenditure	78%	70%	50%	68%	61%	68%	76%	77%	71%

Source: BIS; VfMD

Effective allocation of IT spending requires preparation of an information system development concept as part of the new Generic Force Structure (2035). The MOD's IT environment includes specialized systems and infrastructure of the Armed Forces forming a part of military equipment, which are not comparable with standard administration systems. Further operation and development of the Armed Forces need to be covered in the new Generic Force Structure (2035). It is necessary to map the current status of specific information and communication

technology and evaluate if they are commensurate to the needs, review the cost efficiency of their operation and propose solutions for improvement and elimination of deficiencies.

Starting from 2018, the 0EK inter-ministerial programme was supposed to provide a basic overview of the MOD's administration systems, but the Ministry does not use the programme (ODPMII, 2018). 0EK supposes information systems with annual expenditure exceeding EUR 100 thousand to be budgeted as individual items. Expenditure on specific defence IT systems of the AFSR, Military Intelligence and Military Police can be budgeted under a separate budget programme. Expenditure on standard administration systems of the MOD should be budgeted in accordance with the methodological guidance for 0EK, which had not been used at all until 2019. The budgeting of systems with annual expenditure exceeding EUR 100 thousand as individual items would help to identify systems with the highest cost-efficiency review potential.

The Ministry of Defence plans to implement three projects with costs exceeding EUR 10 million in 2020 - 2022, which seem to be IT investments. Based on the Act on general government budgeting rules, an investor is required to prepare and publish a feasibility study prior to starting an IT investment project exceeding EUR 10 million in value. The investor is further obligated to notify the publishing of the feasibility study to the MoF SR to perform an economic review of the study.

Table 32: Planned IT expenditure of the MOD (EUR million)

Item	2020	2021	2022	Total
700 Capital expenditure	11.3	27.2	35.0	73.4
39400 Command points' communication system	2.0	12.0	16.0	30.0
31154 IS of the stationary digital radio-relay system (SDRRS) [sic]	2.0	4.5	4.5	11.0
37082 MILSEC project	3.0	3.5	3.5	10.0
Other	4.3	7.2	11.0	22.4

Source: BIS; VfMD

5. Programme Budgeting

- Performance budgeting is a key instrument for aligning expenditure with the most important objectives of public policies.
- This is not fully supported by the current programme structure of the MOD. Most of the public targets and indicators do not reflect the key objectives of defence.
- Also, the programme structure does not support linking all relevant expenditure to outcomes. Allocations aimed at achieving the same outcome (such as the deployability of forces) are made in multiple programmes.
- The generic names of budget sub-programmes and elements impair their understanding by the public. Given the relatively simple programme structure, the addition of new programmes and elements to the structure could increase its informational value.

Table 33: Measures covering Programme Budgeting

	Measure	Responsibility	Deadline
32	Ensure that defence expenditure is reported in the general government budget and to NATO in strict compliance with NATO methodology	MOD SR, MoF SR	continuously
33	Align the programme structure of the budget and of the Programme Plan of the MOD as well as the corresponding key outcome indicators with the recommendations of this spending review	MOD SR, MoF SR	31 Mar 2021
34	Define the key outcome indicators for the MOD chapter of the general government budget in accordance with the recommendations of this spending review	MOD SR, MoF SR	31 Aug 2020

Source: VfMD

Performance budgeting is a key instrument for aligning expenditure with the most important objectives of public policies. This is, however, not fully enabled by the current programme structure of the MOD. Most of the published indicators do not reflect the key objectives of defence. The programme budget includes 14 measurable indicators, six of which are outcome indicators. The remaining 8 indicators, which use output or a logical value to measure the performance of an activity, provide little information on policy outcomes. The number of managed construction projects or of off-road vehicles, for example, does not say much about performance against Capability Targets. Also, monitoring logical indicators (such as ensuring management system efficiency; implementation of new projects; or facilitation of research and development) does not contribute to linking expenditure to outcomes. On the other side, a programme budgeting set-up which requires that indicators should be set at the lowest level of the programme structure may encourage chapters to formulate an excessive number of indicators. A good example of performance monitoring is the use of outcome indicators measuring deployability and sustainability within the Defence programme, which are in line with the defence objectives.

The published programme structure does not include any indicators for (the deployability and sustainability of) the air force, which are among the key outcome indicators of defence. It also omits the task of building a heavy infantry brigade. This review recommends improving the measurement and assessment of the key defence objectives by way of monitoring key outcome indicators in the general government budget (refer to the Objectives and Outcomes in Defence Chapter and the relevant measure).

Table 34: Current measurable indicators in the programme structure of the MOD, 2019 -2021

Programme	Indicator	Type	2019	2020	2021
Defence Development	Number of managed construction projects	Output	3	3	4
Defence Development	ANTT – N3G vehicle and its modifications (units)	Output	16	15	15
Defence Development	MDC - Main Data Centre availability to users (%)	Outcome	65	70	75
Defence Development	Aircraft operability percentage (%)	Outcome	66.67	66.67	66.67
Defence	Ensuring management system efficiency	Logical	Yes	Yes	Yes
Defence	Percentage of sustainable land forces (SF)	Outcome	10	10	10
Defence	Percentage of deployable land forces (DF)	Outcome	50	50	50
Defence	Percentage of deployable special operations forces	Outcome	20	30	40
Defence	Percentage of sustainable special operations forces	Outcome	85	105	130
Development Assistance	Implementation of development projects or humanitarian aid	Logical	Yes	Yes	Yes
State Defence Support	Facilitation of research and development in support of state defence	Logical	Yes	Yes	Yes
Economic Mobilisation	Number of defence entities and entities with preserved production capabilities for defence purposes	Output	11	11	11
Engagement of Civilian Experts	Number of experts prepared and seconded	Output	3	3	3
Implementation of WHO IHR	Percentage of material and equipment provided	Outcome	90	100	100

Source: Processed by VfMD based on data from the Programme Budgeting Module

Programmes

Similarly to indicators, programmes are not formulated with the aim of monitoring the key tasks of the AFSR in mind. Nearly all expenditure of the MOD (97%) is allocated to two programmes: the investment programme (Defence Development) and the operations programme (Defence). This structure helps the chapter managers to better manage investments and the operation of agencies; this, however, can as well be achieved through the economic classification. The current programme structure does not even allow the attribution of all expenditure to relevant policy objectives.

Integration of capital expenditure along with operating expenditure into programmes that follow the substantive purpose of expenditure would reinforce the link between outcomes and expenditure. A combination of capital expenditure (purchase of equipment) and operating expenditure (personnel and training) is needed to achieve the Capability Targets. As a minimum reorganisation alternative, the *Development of Armament, Equipment and Materiel* sub-programme could be split into lots based on the substantive purpose of expenditure. A more concrete definition of the sub-programme would enable the attribution of relevant outcome indicators based on the purpose of expenditure.

Extension of the programme structure would enhance the comprehensibility and informational value of the expenditure structure. Compared to other Ministries, the MOD has a relatively narrow programme structure. Possible reorganisation could bring greater detail while maintaining simplicity. Given their size, the *Land Defence* and *Air Defence* elements could be programmed at a sub-programme level. Moreover, breaking down the *Land Defence* element in accordance with the heavy brigade components could enable the monitoring of their respective contributions to the attainment of the overall goal.

Clearer names of elements would also contribute to the comprehensibility of the programme structure. The *Defence Management and Support* sub-programme includes three elements having the word “support” in their name, while a more particular description of their objectives or goals is lacking. Renaming the elements or adding a description of their goals would enhance the clarity of the purpose of expenditures.

The structure of expenditures does not support the monitoring of operational readiness separately for personnel, equipment and training. Until 2014, the MOD monitored expenditure on military training and education

under a specific sub-programme. As training is one aspect of operational readiness for the heavy infantry brigade, setting up a specific sub-programme would help to link expenditure to the objective.

Table 345: Challenges to the monitoring of key objectives within the programme structure of the MOD

Challenge	Proposed solution
1. Improved monitoring of outcomes	Disclosure and evaluation of indicators for Capability Targets in programme budgeting
1.1 Monitoring of performance against the key Capability Targets	Assignment and disclosure of key performance indicators against Capability Targets
1.2 Monitoring of the individual battalions' contributions to the achievement of the heavy infantry brigade's readiness	Budgeting of <i>Land Defence</i> expenditure at the sub-programme level and battalion/brigade expenditure at the element level. Assignment of relevant measurable indicators
1.3 Monitoring of expenditure on training	Reinstatement of the <i>Training and Support of Armed Forces</i> programme and assignment of measurable outcome indicators
2. More informative structure of expenditure	Reorganisation of the programme structure with regard to the Capability Targets
2.1 Fragmentation of expenditure due to the division between operations and investment	Integration of the investment and operations programmes
2.2 Insufficient comprehensibility of the programme structure	Renaming or characterisation of the <i>Security Support</i> , <i>Other Support</i> and <i>Special Support</i> elements to enhance the clarity of the purpose of spending
2.3 A low detail of the programme structure (in particular the current <i>Development of Armament, Equipment and Materiel</i> and <i>Defence</i> sub-programmes)	Division of the Defence programme into two programmes (corresponding to the current sub-programmes), enhancement of detail through the definition of new elements, particularly for the new Defence Command and Assurance programme

Table 36: Current programme structure of the MOD chapter and the proposed new programme structure

Programme/ sub-programme/ element	EUR million	Programme/ sub-programme/ element	EUR million
Defence Development	870.9	Defence Development	871
Development of Armament, Equipment and Materiel	769.0	Development of Armament, Equipment and Materiel	769
Development of Communication and Information Systems	36.6	<i>Armaments</i>	256
Development of Forces Infrastructure	35.6	<i>Equipment</i>	256
Development of Central Logistics	29.7	<i>Materiel</i>	256
Defence	784.4	Development of Communication and Information Systems	37
Command and Defence Assurance	456.3	Development of Forces Infrastructure	36
<i>Command and Command Support</i>	120.7	Development of Central Logistics	30
<i>Ground Defence</i>	183.6	Research and Development	xx
<i>Air Defence</i>	116.6	Command and Defence Assurance	456
<i>Operations outside State's Territory</i>	35.5	Command and Command Support	121
Defence Management and Support	328.1	Land Defence	184
<i>Defence Management</i>	166.2	<i>1st Mechanised Brigade</i>	xx
<i>Security Support</i>	12.9	<i>Mechanised Battalion Group</i>	xx
<i>Immovable Asset Management</i>	50.2	<i>Other Expenditure</i>	xx
<i>Other Support</i>	42.0	Air Defence	117
State Defence Support	1.1	Operations outside State's Territory	35
Secondment of Civilian Experts outside State's Territory	0.3	Special Operations Forces	xx

Table 36: Current programme structure of the MOD chapter and the proposed new programme structure

<i>Programme/ sub-programme/ element</i>	EUR million	<i>Programme/ sub-programme/ element</i>	EUR million
Development Cooperation	0.0	Training and Education	xx
Stage II of Implementation of WHO Regulations	0.0	Defence Management and Support	328
Grand total	1,662.7	Defence Management	166
		Immovable Asset Managements	50
		Special Support	57
		Other Support	42
		Security Support	13
		Economic Mobilisation	6
		State Defence Support	1.1
		Secondment of Civilian Experts outside State's Territory	0.3
		Development Cooperation	0.0
		Stage II of Implementation of WHO Regulations	0.0
		Grand total	1,663

List of Abbreviations

Abbreviation	Description
0EK	0EK Information Technology inter-ministerial programme
2K12KUB	Short-range surface-to-air missile system
AU (of MOD)	Analytical Unit of the Ministry of Defence of the Slovak Republic
BARMO	Housing Agency of the Ministry of Defence
APC	Armoured Personnel Carrier
IARV	ISTAR Armoured Reconnaissance Vehicle
IFV	Infantry Fighting Vehicle
C3	Central-European Defence Reference Group
CIMIC	Civil-Military Cooperation
COFOG	Classification of expenditure by function of Government
COVID-19	New coronavirus disease
CRC	Central Register of Contracts
CSS	Combat Service Support
DESM	Deployable electronic surveillance measures, passive electronic intelligence system
DEU	Federal Republic of Germany
VAT	Value Added Tax
EDA	European Defence Agency
ECBT	Economic Classification of Budgetary Transactions
EU	European Union
EU BG	EU Battlegroup
F3	Founding Defence Reference Group
FTE	Full-Time (Employee) Equivalent
GS AFSR	General Staff of the Armed Forces of the Slovak Republic
GDP	Gross Domestic Product
HNS	Host Nation Support
CHE	Swiss Confederation
IFP	Institute for Financial Policy
ICT	Information and Communication Technology
ICT	Information and Communication Technology
IMF	International Monetary Fund
ISL	Iceland
ISTAR	Intelligence, Surveillance, Target Acquisition and Reconnaissance
IT	Information Technology
CIS	Communication and Information Systems
MTaC SR	Ministry of Transport and Construction of the Slovak Republic
MTC SR	Ministry of Transport and Construction of the Slovak Republic
MoF SR	Ministry of Finance of the Slovak Republic
MEco SR	Ministry of Economy of the Slovak Republic
MC SR	Ministry of Culture of the Slovak Republic
MOD CZE	Ministry of Defence of the Czech Republic
MOD/MOD SR	Ministry of Defence of the Slovak Republic
MARD SR	Ministry of Agriculture and Rural Development of the Slovak Republic
MB	Mechanised Battalion
MLSAF SR	Ministry of Labour, Social Affairs and Family of the Slovak Republic

Abbreviation	Description
MI SR	Ministry of Interior of the Slovak Republic
MH SR	Ministry of Health of the Slovak Republic
MFEA SR	Ministry of Foreign and European Affairs of the Slovak Republic
MEnv SR	Ministry of Environment of the Slovak Republic
N2G	Medium off-road truck
N3G	Heavy off-road truck
NATINAMDS	NATO Integrated Air and Missile Defence System
NATO	North Atlantic Treaty Organisation
NBS	National Bank of Slovakia
SAO	Supreme Audit Office
SAO CR	Supreme Audit Office of the Czech Republic
NLD	Kingdom of the Netherlands
NOR	Kingdom of Norway
NPC	No-Policy-Change Scenario
NC SR	National Council of the Slovak Republic
NRF	NATO Response Forces
NSPA	NATO Support and Procurement Agency
OECD	Organisation for Economic Cooperation and Development
AFSR	Armed Forces of the Slovak Republic
pp	percentage point
PESCO	EU Permanent Structured Cooperation
SAM	Surface-to-air Missile (System)
DSAF	Directly Subordinated Agencies and Facilities
PS	Professional Soldier
PSYOPS	Psychological Operations
ATGM	Antitank Guided Missile (System)
Q	Quarter
R&D	Research & Development
R&T	Research & Technology
CBRN	Chemical, biological, radiological and nuclear (defence)
BIS	Budgetary Information System
ROK	Republic of Korea
CBR	Council for Budget Responsibility
GGB	General Government Budget
S-300	Medium-range surface-to-air missile system
SIPRI	Stockholm International Peace Research Institute
SLOPEM	Slovak Pension Model
SR	Slovak Republic
ASMR SR	Administration of State Material Reserves of the Slovak Republic
SVK	Slovak Republic
SWE	Kingdom of Sweden
TBD	To Be Determined
INF-H-BDE	Heavy Infantry Brigade
GCCA SR	Geodesy, Cartography and Cadastre Authority of the Slovak Republic
VfMD	Value for Money Division
NRA SR	Nuclear Regulatory Authority of the Slovak Republic

Abbreviation	Description
UK MOD	Ministry of Defence of the United Kingdom of Great Britain and Northern Ireland
ODPMII	Office of the Deputy Prime Minister of the Slovak Republic for Investments and Informatisation
USZV	MOD Special Healthcare and Training Institute
GO SR	Government Office of the Slovak Republic
OPP	Office for Public Procurement
CSP	Candidate Selection Process
Dukla MSC	Dukla Military Sports Centre
AMPV	Armoured Multi-purpose Vehicle
WHO	World Health Organisation

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Annexes

Annex 1: Defence Reference Group

The reference group was chosen for the purposes of a more detailed comparison of defence expenditure and outcomes. The selection of countries was made with regard to both quantitative and qualitative indicators, in particular NATO membership, size of country and size of its armed forces, economic indicators, defence policy and strategic culture.⁶³ Countries are divided into an immediate reference group of Central and Eastern Europe countries with a similar baseline position (Czech Republic, Hungary and Lithuania, collectively “C3”, Central-European members) and an extended group of selected Allies which represent a higher ambition for Slovakia (Denmark, Belgium and the Netherlands, collectively “F3”, founding members). Poland was omitted from the traditional referencing for Slovakia because of the size of the country and its armed forces, which put Poland in the category of regional powers. Benchmarking in this review also includes certain small countries which, because of the size of their armed forces, have a limited scope of available capabilities and a similar extent of commitments towards NATO. The diversity of the selection at the same time allows comparison with countries with a different strategic culture and approach to the implementation of defence policy. The founding group is characterized by a more advanced and ambitious strategic culture, an expeditionary nature of armed forces and deployment of troops in combat operations.

Given our common past as one state, the identical baseline position in building armed forces and the long-established intensive political and military cooperation, the **Czech Republic** holds a special position within the reference group. While its defence expenditure has been around 1% of GDP for most of the last decade, the MD CR has implemented several strategic modernisation projects. As a member of NATO and of the EU, the Czech Republic has assumed a leading role in building helicopter capabilities and gained a high credit for the deployment of special forces side by side with the USA in Afghanistan. The extensive National Security Audit (2016), designed by an expert group composed of representatives of all security community members and selected central government agencies, contributed to the depoliticisation of the debate on security and provided a room for inter-ministerial cooperation in response to major challenges, including hybrid threats and information war.

Hungary, the second reference country of the Visegrad Group is cooperating with Slovakia in a number of multinational projects, including the joint EU Battlegroup. As regards the public perception of security, internal, non-military threats are prevailing. Similarly to the Czech Republic, Hungary has taken out a lease on Gripen aircraft to contribute to the safeguarding of other Allies' skies. Its security culture is characterized by conservative Atlanticism and pacifism, signaled by substantial restrictions on the use of military force and risk-avoiding efforts (Tálas, Csiki, 2013). Low expenditure on defence (1.2% of GDP per year on average since 1999) and a slow pace of defence reform following Hungary's entry into NATO became the object of repeated criticism from Allies (Wallander, 2002; Richburg, 2002). The Zrínyi 2026 medium-term upgrade programme aspires to markedly increase the numbers of military forces and change their equipment, structure and organisation. The fiscal target is to double the defence budget by 2024 and increase it annually by 0.1% of GDP (Draveczi-Ury 2017) so that the 2% GDP level is achieved by 2026 (Kovács 2018).

⁶³ Strategic culture is understood as positions, norms and ideas shared within society which generate certain expectations with regard to the preferences and behaviours of the community in security and defence policy. Strategic culture follows from common experience and the narratives adopted by a certain security community. The principal aspects of national security and defence policy are reflected in four areas: 1) the level of security policy ambitions in the international field; 2) the scope of the Government's policy-making powers; 3) foreign-policy orientation; and 4) willingness to use military force. Strategic culture is relatively stable, but not changeless. Exceptional moments that drive political actors to changing strategic culture may include crises or strategic shocks (Biehl et al., 2013).

Lithuania, the largest Baltic country has a geopolitical position at NATO's eastern border similar to that of Slovakia, and a comparable size of armed forces. The country's historical experience drives its vigilance towards military and hybrid threats from Russia, pro-America foreign policy orientation and strong attachment to NATO. The core of Lithuania's security culture is militarism (preference for the use of force in tackling security threats), Atlanticism and limited resources (Seselgyte, 2013). Relying on the defence of its airspace by Allies, Lithuania is putting an emphasis on building deployable land forces which make an above-standard contribution to NATO operations and missions, including in high-intensity conflicts in Afghanistan and Iraq. In response to Russia's wars with Georgia and Ukraine, Lithuania reintroduced the basic military service and nearly doubled the size of its armed forces (from 8.6 thousand in 2014 to 15.9 thousand in 2019). The political agreement of Lithuania's political parties provides for annual increases in defence expenditure in order to reach 2.5% of GDP by 2030 (Sytas, 2018).

Denmark ranks among a group of influential NATO countries, which is attributable to, among other things, the high credit of the country's air force in the Alliance's operations and to the results it has achieved in defence planning in close alignment with NATO's priorities. While an exception from participation in the defence cooperation in the EU is laid down in Denmark's constitution, its perception of security interests and challenges has gradually been harmonized with the EU (Nissen, 2017). Since 2016, Denmark has been pursuing a so-called interests-based foreign policy, which narrows the definition of the state's key interests and prioritizes efforts. The state defence is based on the Total Defence concept, relying on limited conscription. Denmark engages in multinational projects of the Nordic countries (NORDEFKO). The political ambition of Denmark is the deployability of 2,000 soldiers in operations. The purchase of 27 F-35 fighters worth USD 3.1 billion in 2016⁶⁴ was the highest investment in the history of Danish armed forces. The stability of defence priorities and resources rests upon a defence agreement, which is approved by coalition parties for the term of the Government and its implementation is reviewed annually by the Parliament's Defence Committee on the basis of a report submitted by the Ministry of Defence.

Belgium. The principal direction of the security and defence policy of the Kingdom of Belgium and plans for the development of its armed forces are defined in a coalition agreement covering the term of a particular Government instead of strategic documents. As a country with a pacifistic history, Belgium is showing low tolerance to war losses (Biscop, 2013). Being strongly anchored in NATO, Belgium also belongs to the core of the countries which have for long promoted the federalisation of the EU and an autonomous European defence, including setting up military-political institutions. The country has a high rate of participation of military personnel in the management of the state's defence. For Belgium, the only way to maintain its military-relevant capabilities in a cost-effective manner is through joint procurement and merging of capabilities in permanent multi-national units (Biscop, 2013). Belgium's naval forces are integrated (without any impairment of sovereignty) with the Dutch navy within the framework of the Admiral BENELUX initiative. The strategic vision by 2020 foresees the replacement of all major types of technical equipment and reorganisation of two land force brigades into five combat groups.

The Netherlands is a respected NATO member. Since the end of the Cold War, it has actively been engaging in international events, both diplomatically and militarily, this despite the absence of a strong military tradition and the public's scepticism towards strong military commitments (Van Loon, 2017). The Netherlands was among the first countries to proceed to the transition from territorial forces to expeditionary capabilities, including the abolition of conscription, which reflects the country's status as a small state with a highly developed, export-oriented economy. Strengthened by a high credit of its engagement in ISAF's operations in Uruzgan, the Netherlands sees itself as a part of the first league of the most influential western powers (Noll, Moelker, 2013). In response to drastic budget cuts following the financial crisis, the Ministry of Defence has focused its efforts on retaining combat capabilities as much as possible, at the expense of operation and administration. The outcome of this is a very lean organisation with almost zero reserves, particularly in the area of combat support and services (Van Loon, 2017). The parliament

⁶⁴ <https://www.defensenews.com/air/2017/11/13/danish-audit-agency-questions-data-for-f-35-purchase/>

is exerting a strong control over the defence budget. The Netherlands performs regular spending reviews of defence and of other sectors as well, with a specific focus on particular subjects (armaments, operational readiness).

Annex 2: Different defence expenditure calculation methodologies

Box 13: Defence expenditure methodologies (NATO, COFOG, EDA)

The defence spending review needs a suitable method that allows international comparison and provides the highest possible degree of detail for Slovakia and the reference countries. Out of the available sources referred to below, the NATO methodology seems to be the best match to those requirements. Where NATO data does not include certain information or indicators, the analysis uses data and indicators of other methodologies, too.

NATO methodology⁶⁵

The methodology covers all central government expenditure on the needs of the armed forces of a country and of the Allies. Expenditure on other forces (e.g. Coast Guard, Italy's *Carabinieri* etc.) is included only to the extent such other forces have military training and equipment and are subordinated to military command. Expenditure on pensions of the military and civilian personnel of the Ministry of Defence and of the Armed Forces is also included. All such expenditure is classified as defence expenditure irrespective of whether or not it is paid by the Ministry of Defence. Accordingly, in addition to the MOD expenditure, expenditure treated as defence spending also includes a part of other central government bodies' expenditure (EUR 11.8 million in 2019, of which EUR 11.3 million was spent by the Ministry of Economy, the Administration of State Material Reserves, the Ministry of Transport and the Ministry of Health, Table 13).

NATO classifies expenditure into four basic categories: *personnel* expenditure (including pensions), *equipment* expenditure (including research and development), *infrastructure development and maintenance* expenditure and *other* defence expenditure. (NATO, 2019g, p. 16) The classification supports the international comparability of investment and operation expenditures as well as the determination of approximate costs of training.

NATO data contains information for all the selected reference countries; the most recent data covers the years 2013 - 2019.

The accuracy of Slovakia's reporting of defence expenditure to NATO is examined in Box 4: Defence Expenditure Reporting to NATO.

COFOG (Classification of Functions of Government) methodology⁶⁶

The Classification of Functions of Government, COFOG categorizes general government expenditures by government function instead of policy target (e.g. military healthcare is classified as expenditure on healthcare, not defence). Other expenditures are categorized into five groups: Military Defence, Civil Defence, Foreign Military Aid, Defence Research and Development and Defence Not Elsewhere Classified.

Approximately 9% of the expenditure of the MOD since 2016 has not been classified as defence expenditure, 82% of which is retirement pensions which are classified as social security expenditure. This classification does not support the international comparison of the structure of expenditures.

Published Eurostat data processed with the use of this methodology and including all the selected reference countries is available for the years 1995 – 2017.

EDA (European Defence Agency) methodology⁶⁷

The methodology includes all expenditure of the Ministry of Defence irrespective of the purpose of spending, and the spending of other resources related to defence. Pensions paid to former civilian and military personnel are included only to the extent they are paid from the budget of the Ministry of Defence.

The European Defence Agency classifies defence expenditures into five categories: Personnel, Infrastructure/Construction, Defence Investment, Operation and Maintenance and Other. Defence Investment is further broken down into equipment procurement expenditure and research and development expenditure; Other expenditure is further divided into foreign operations and outsourcing.

Agency data is available for the years 2005 - 2017, without Denmark, a reference country, which is not a member of EDA.

⁶⁵ NATO, 2019g

⁶⁶ Classifications of Expenditure According to Purpose: <https://unstats.un.org/unsd/publications/catalogue?selectID=145>

⁶⁷ European Defence Agency Definitions: <https://www.eda.europa.eu/info-hub/defence-data-portal/Definitions>

Table 37: Defence expenditure as percentage of GDP by methodology

Methodology	2012	2013	2014	2015	2016	2017	2018
NATO	1.09%	0.98%	0.99%	1.12%	1.12%	1.10%	1.22%
COFOG	0.90%	0.90%	1.00%	0.90%	0.80%	1.00%	
EDA	1.09%	0.98%	0.98%	1.13%	1.12%	1.17%	

Source: NATO, 2019fg; Eurostat 2019c, EDA 2018; VfMD

Table 38: Comparison of methodology contents

	versus NATO	versus COFOG	versus EDA
NATO	x	Includes retirement pensions; covers all NATO countries, including non-EU ones; uses longer time series within periods and a more detailed data structure; includes personnel numbers in addition to expenditure	Uses longer time series within periods; more detailed data is available; all reference states are covered
COFOG	Time series preceding reported periods are available; covers all NATO countries, including non-EU ones, plus CHE, NOR and ISL	x	Time series preceding reported periods are available; covers all NATO countries, including non-EU ones, plus CHE, NOR and ISL
EDA	Time series preceding reported periods are available; covers all EU countries except Denmark, including non-NATO ones	Includes retirement pensions; uses a more detailed data structure; includes personnel numbers in addition to expenditure	x

Source: VfMD

Annex 3: Numbers and versions of equipment required for the heavy infantry brigade by unit

Table 39: Quantities and versions of equipment required for the heavy infantry brigade by unit

Unit	Equipment	Number	Version	ICT addition
11th Mechanised Battalion	New tracked APC	51	7	No
	8x8 APC	1	1	
	4x4 AMPV	10	3	
12th Mechanised Battalion	New tracked APC	51	7	Yes
	8x8 APC	1	1	
	4x4 AMPV	10	3	
13th Mechanised Battalion	New tracked APC	51	7	Yes
	8x8 APC	1	1	
	4x4 AMPV	10	3	
Tank Battalion	New tank	32	3	No
	New armoured vehicle-launched bridge	3	1	
	New tracked APC	9	3	
	4x4 AMPV	1	1	
ISTAR Battalion	4x4 AMPV	34	3	Yes
	Staff car	14	1	
	IARV	6	1	
	ISTAR sets	6	4	
	Mobile communication centre	2	1	
	Armoured mobile staff-command vehicle	4	1	
Self-propelled Artillery Battalion	Zuzana 2	24	1	
	4x4 AMPV	11	2	
	Weather station	1	1	
	DELOSYS	3	1	
	Radar	1	1	
CIMIC and PSYOPS Centre	4x4 AMPV	2	1	Yes
	Staff car	4	2	
CBRN Protection Battalion	-	-	-	Yes
CSS Battalion	-	-	-	No
ROLE2E Field Hospital	“additional logistic capabilities”			Yes
Military Police Company	“additional transport means”			Yes
Logistics Battalion Topoľčany	New tracked APC	2	1	No
	New armoured vehicle-launched bridge	2	1	
	Truck	181	6	
	Repair container	9	2	
	100 m3 service water tank + vehicle	6	1	
Command Support Battalion Topoľčany	Truck	109	6	No
	Repair container	5	2	
	Mobile communication centre	38 – 48	3	
Military Engineering Battalion	4x4 AMPV	10	2	Yes
	New armoured vehicle-launched bridge	12	1	
	APC	34	4	
	Armoured vehicle-launched bridge	16	1	
	Armoured wheeled excavator	24	1	
	Truck	50	3	
	Dozer/earth mover	6	2	
	100 m3 service water tank / 24	4	1	
50 m3 water storage tank	4	1		
Total		855 – 865		

Source: GS AFSR, 2018ab; VfMD 2020

Annex 4: Numbers of the AFSR's key equipment past service life

Key equipment is understood as including combat tanks, combat and reconnaissance vehicles, armoured personnel carriers, various howitzer types, rocket launchers, mortars, antitank systems, various types of aircraft, helicopters and anti-aircraft systems and radars.

The table does not include service support equipment of the listed units (such as military engineering and logistic equipment) or service support units equipped only with such equipment.

The designated service life of such equipment is 20 years when in use, and two years of storage are equivalent to one year of use (MOD, 2018f). As issued in expert guidelines, numbers of flight hours are monitored for some types of aircraft.

Table 40: Quantities of key equipment past service life

Unit	Quantity	Past service life	%
Tank Battalion Trebišov*	24	24	100%
11th Mechanised Battalion Martin *	49	45	92%
12th Mechanised Battalion Nitra *	51	47	92%
13th Mechanised Battalion Levice *	53	26	49%
21st Mechanised Battalion Trebišov	52	48	92%
22nd Mechanised Battalion Michalovce *	53	43	81%
Self-propelled Artillery Battalion Michalovce	25	25	100%
23rd Motorised Battalion Trebišov	7	6	86%
ISTAR Battalion Prešov *	18	0	0%
Multiple Launch Rocket System Battalion Rožňava	24	0	0%
<i>Martin</i> Training and Mobilisation Manning Base	18	18	100%
<i>Martin</i> Supply Base	42	38	90%
5th Special Purpose Regiment Žilina	4	0	0%
Sliač Tactical Wing	24	7	29%
Kuchyňa Transport Wing	11	2	18%
Prešov Helicopter Wing	22	8	36%
Anti-aircraft Missile Brigade Nitra	40	40	100%
Zvolen Command, Control and Reconnaissance Wing	17	17	100%
Total	534	394	74%

*units intended for the heavy infantry brigade

Source: Data provided by AFSR, 2019. Analysis: VfMD

Annex 5: Assumptions for the calculation of fair public health and social insurance contributions

Assumptions for the calculation of fair public health and social insurance contributions:

- With regard to the gender structure of the police and military forces, mortality tables for men are used for the sake of better comparability
- The analysis considers a flat pay profile (a soldier, a police officer and a civilian officer receive annually the average salary of their profession)
- The analysis employs a SLOPEM (Slovak Pension Model) based inflation and wage growth projection
- The baseline year for the calculation of the time value of money is the year when the payment of contributions started
- The baseline year for the calculation of the real value of money of salaries and the current pension value is 2018
- The model assumes the adjustment for pension inflation within the meaning of Section 68 (16) of the Act No 328/2002 as currently in force, i.e. that to be effective after the transition period lasting until 31 December 2021 (Act No 153/2013)
- The transitional provisions do not apply to police officers/soldiers who entered into service after 30 April 2013
- The rate of growth of the assessment basis of soldiers and police officers assumed in the projection is identical to that of the average salary
- A civilian officer works until the age of 63 and retires at the age of 64
- The adjustment for pension inflation does not increase the fair value of a pensioner's pension (even if it is higher than CPI).

Details of the long-term sustainability calculation:

- The analysis employs basic demographic and macroeconomic development parameters derived from SLOPEM (Slovak Pension Model)
- A medium scenario is used which stands between the first-year scenario with a fixed number of police officers and soldiers and a scenario assuming a development proportional to the population
- Legislation providing for a gradual rise of the minimum length of service is considered
- The model does not afford a retirement pension to anyone who has not reached the minimum length of service. For time after the transitional period, a mid-scenario between the two extreme scenarios is used. The first extreme scenario assumes that police officers/soldiers will wish to leave at such times of service as at present but they will not be able to leave and, accordingly, they will leave as soon as they can. The second extreme scenario assumes a probability of leaving which is the same as that of the old system except that it is postponed by 10 years (i.e. the number of police officers/soldiers leaving after 25 years will be the same as the numbers formerly leaving after 15 years, etc.)
- Mortality tables for men are used for active police officers and soldiers and those who are retired, disabled or male widowers; mortality tables for women are used for female widowers; and combined tables are used for orphans.

Annex 6: Overview of ESA economic classification categories and items included in salary and personnel expenses and employee compensations

Employee compensations	Salary expenses	Personnel expenses	610 Wages, salaries, service income and other personnel compensations
			611 Tariff salary, personal salary, basic salary, office salary, rank salary, salary, including their replacements
			612 Extra pay
			613 Compensation and remuneration for standby work/service duty
			614 Benefits
			615 Other personal compensations
			616 Additions to salary and additional salaries
			620 Insurance premiums and contributions
			621 Insurance premiums paid to <i>Všeobecná zdravotná poisťovňa</i> (public health insurance fund)
			623 Insurance premiums paid to other health insurance funds
625 Insurance premiums paid to the Social Insurance Fund			
627 Contributions paid to supplementary pension insurance funds			
628 Insurance premiums paid to special accounts			
629 Contributions to old-age pension saving schemes			
630 Goods and services			
631 Travel expense refunds (part of expenses)			
637 Services (selected items)			
640 Current transfers			
642 Transfers to individuals and non-profit legal persons (selected sub-items)			

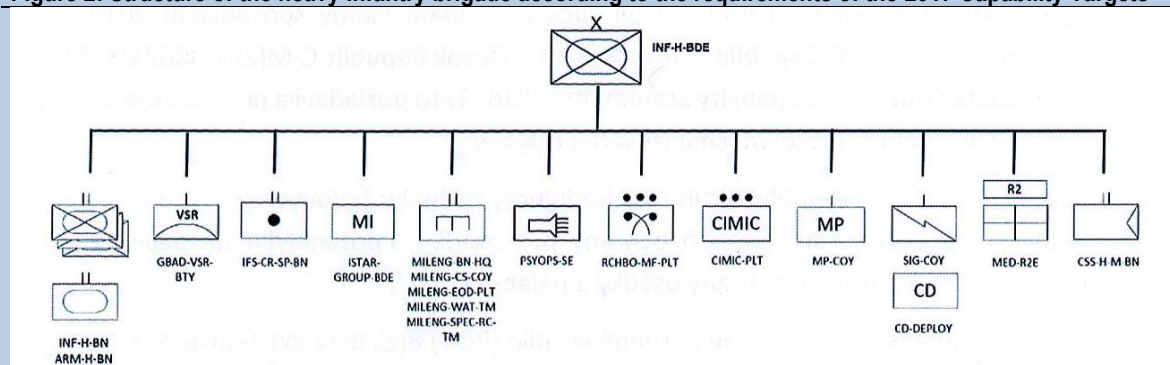
Annex 7: Structure of the heavy infantry brigade

Box 14: Structure of the heavy infantry brigade

The structure of INF-H-BDE and the units of which it is to be composed are specified by the General Staff of AFSR (GS AFSR, 2018ab) as follows:

- **Heavy Mechanised Brigade Command** (1st Heavy Mechanised Brigade Topoľčany)
- **3 x Mechanised battalion** (11th Mechanised Battalion Martin, 12th Mechanised Battalion Nitra and - 13th Mechanised Battalion Levice)
- **1 x tank battalion** (Tank Battalion Trebišov)
- **Very short range air defence battery** (1st anti-aircraft battery Nitra)
- **Indirect fire support battalion** (Self-propelled Artillery Battalion Michalovce)
- **ISTAR Centre** (ISTAR Battalion Prešov)
- **Military Engineering battalion** (Military Engineering Battalion Sered')
- **Brigade Support Element of psychological operations** (CIMIC and PSYOPS Centre Martin)
- **Multifunctional CBRN platoon** (CBRN Company of CBRN Battalion Rožnava)
- **Civil-military cooperation platoon** (CIMIC and PSYOPS Centre Martin)
- **Military police company** (MOD Military Police Company)
- **Cyber security unit** (Deployable Communication Systems Base)
- **ROLE2E Field Hospital** (Surgeon General Office Ružomberok)
- **Combat Service Support battalion** (CSS Battalion Topoľčany)

Figure 2: Structure of the heavy infantry brigade according to the requirements of the 2017 Capability Targets



Source: GS AFSR, 2018a. Analysis: VfMD

The heavy infantry brigade is presently drawn from units from across the entire armed forces on the basis of the availability of combat-ready equipment, manning and training, it is not organised as described above. NATO and the General Staff recommend organising INF-H-BDE as an organic unit based on the 1st Mechanised Brigade. (NATO, 2017; MOD, 2019h)

Erratum

Name of the document: Defence Spending Review Final Report (July 2020)

Note: This English version corresponds with corrections made to the review on 17 May 2021.

Location	Original text	Correction
Page 8	Over the long term, Slovakia has above-average expenditure on personnel and below-average expenditure on operations and infrastructure.	In 2012-2018, Slovakia had above-average expenditure on personnel and below-average expenditure on operations and infrastructure.
Page 19, Table 6	Source: NATO 2019fg, Eurostat, EDA 2018; VfMD	Source: NATO 2019fg, Eurostat 2019c, EDA 2018; VfMD
Page 20, Table 8	2017 (header of third numerical column)	2018 (header of third numerical column)
Page 37, Table 20	VfMD proposal 4. Zuzana 2 New call for tenders	VfMD proposal 4. Zuzana 2 –
Page 37, Table 20	VfMD proposal 10. Multi-purpose tactical aircraft (F-16) Review quantity	VfMD proposal 10. Multi-purpose tactical aircraft (F-16) Ensure most efficient use
Page 90, Table 37	Source: NATO 2019fg, Eurostat, EDA 2018; VfMD	Source: NATO 2019fg, Eurostat 2019c, EDA 2018; VfMD
Page 78		EDA. 2017. <i>EDA Collective and National Defence Data 2005-2017e</i> . (Excel). Available on-line at: https://www.eda.europa.eu/docs/default-source/documents/defence-data-2005-2017.xlsx (9.12.2019)
Page 78		EUROSTAT. 2019c. <i>General government expenditure by function (COFOG)</i> . Available on-line at: https://appsso.eurostat.ec.europa.eu/nui/show.do?query=BOOKMARK_DS-471197_QID_42508AFA_UID_-3F171EB0&layout=TIME,C,X,0;GEO,L,Y,0;UNIT,L,Z,0;SECTOR,L,Z,1;COFOG99,L,Z,2;NA_IT,EM,L,Z,3;INDICATORS,C,Z,4;&zSelection=DS-471197UNIT,PC_GDP;DS-471197COFOG99,GF03;DS- (4.11.2019)
Page 80		MOD CZE. 2019b. <i>KONCEPCE VYSTAVBY ARMÁDY ČESKÉ REPUBLIKY 2030</i> . Ministry of Defence and Armed Forces of the Czech Republic – VHÚ Praha, 2019. Available on-line at: https://www.acr.army.cz/assets/technika-a-vyzbroj/modernizace/koncepce_2030.pdf