

Appendix 12: State guarantees and other multiannual liabilities

Loan guarantees

MEUR	Valid 31.12.2018	Valid 31.12.2017	Valid Change 2018-2017	Maximum amount available 31.12.2018
Companies	134	166	-32	190
Finavia Oyj ¹⁾ <i>Act on the incorporation of the aviation administration as a limited company (877/2009)</i>	83	98	-15	83
Terrafame Oy <i>Budget 2017 (1314/2016), Government resolution 17.5.2018²⁾</i>	51	68	-17	107
Finance and insurance institutions	10 772	8 746	2 025	21 550
Finnvera Oyj <i>- Act on the State-Owned Specialised Financing Company (443/1998), Government resolution 20.4.2017, capital investment in bonds³⁻⁴⁾</i>	10 772	8 709	2 062	21 550
<i>- Act on Credits and Guarantees Provided by the State-Owned Specialist Financing Company (445/1998) capital investment in credit and guarantees⁵⁾</i>	8 711	6 476	2 235	15 000
<i>- Act on State Guarantees Granted to Companies Engaged in Shipbuilding or Shipowning Operations (573/1972), Act on the State Guarantee Fund (444/1998), amount of ship credit guarantees and hedging instruments⁵⁻⁷⁾</i>	1 974	2 129	-155	4 200
<i>industry for investments promoting environmental protection (609/1973), Act on the State Guarantee Fund (444/1998), credit guarantees⁵⁻⁶⁾ and⁸⁾</i>	86	99	-13	1 350
Suomen Vientiluotto Oy <i>Supplementary budget for 2003, sub-item 28.82., Government resolution 18.6.2003</i>	-	37	-37	-
General government	-	-	-	770
Unemployment Insurance Fund <i>Act on the financing of unemployment benefits (555/1998), first supplementary budget for 2015 (224/2015), Government resolution 20.4.2017⁹⁾</i>	-	-	-	770
Households	3 368	2 735	633	4 359
Guaranteed student loan funds <i>Act on financial aid for students (28/1972), act on financial aid for students in higher education (111/1992) and act on financial aid for students (65/1994)</i>	3 368	2 735	633	4 359
Non-profit institutions serving households	-	2	-2	-
Stiftelsen för Svenska Teatern i Helsingfors <i>Second supplementary budget for 2009 (737/2009), Government resolution 21.1.2010</i>	-	2	-2	-
Rest of the world	7 203	7 194	8	14 346
European Financial Stability Facility (EFSF) <i>Act on State guarantees for the EFSF (668/2010), Government resolution¹⁰⁾</i>	7 042	7 006	36	13 974
Nordic Investment Bank (NIB) <i>Act on implementing the regulations in the field of legislation on the contract of Nordic Investment Bank (982/2004), petitionary motion 1432/2004</i>	161	188	-27	372
State guarantees total	21 477	18 844	2 633	41 216

Export guarantees

MEUR	Valid 31.12.2018	Valid 31.12.2017	Valid Change 2018-2017	Maximum amount available 31.12.2018
Companies	25	25	-	25
Nammo Vihtavuori Oy	25	25	-	25
<i>Fourth supplementary budget for 2013 (836/2013), Government resolution 19.12.2013</i>				
Finance and insurance institutions	20 428	19 586	842	46 107
Finnvera Oyj	19 664	18 970	694	27 800
<i>Act on the State's Export Credit Guarantees (422/2001), Act on the State Guarantee Fund (444/1998), Total liability for export guarantees and hedging instruments ⁵⁻⁶ ja ¹¹⁾</i>	19 573	18 970	603	27 000
<i>Act on State guarantees for ensuring the supply of basic raw materials (651/1985), Act on the State Guarantee Fund (444/1998), Total liability for raw material guarantees and protective arrangements ⁵⁻⁶ and ¹²⁾</i>	91	-	91	800
Insurance guarantee for insurance institutions under emergency conditions	-	-	-	10 000
<i>Act on insurance guarantee under emergency conditions (408/2007)</i>				
Suomen Pankki	534	406	129	8 064
<i>Decision of Parliament (1273/2011), Government resolution 18.2.2016, Decision of Parliament (139/2017), Government resolution 30.3.2017</i>				
Finnish Fund for Industrial Cooperation Ltd. (Finnfund)	229	210 ¹³⁾	19	243
<i>Finnfund Act (291/79), first supplementary budget for 2018 (526/2018) and Government resolution 20.9.2018; the capital of the investments and credits included in the loss compensation commitment</i>	61	-	61	75
<i>Finnfund Act (291/79), second supplementary budget for 2012 (375/2012) and Government resolution 20.9.2012; the capital of the investments and credits included in the loss compensation commitment</i>	-	42 ¹³⁾	-42	-
<i>Finnfund Act (291/79), third supplementary budget for 1993 and Government resolution 16.7.1993; the capital of the investments and credits included in the loss compensation commitment</i>	168	168	-	168
General government	11	27	-16	1 000
HAM Helsinki Art Museum	11	-	11	
National Gallery/Ateneum Art Museum	-	6	-6	
City of Tampere/Sara Hildén Art Museum	-	20	-20	
<i>Act concerning State Indemnity for Art Exhibitions (411/1986)</i>				1 000
Export guarantees total	20 463	19 638	826	47 132
State guarantees total	41 940	38 482	3 459	88 348

¹⁾ The amount of State guarantees does not include guarantees granted by the Civil Aviation Administration (the predecessor of Finavia Oyj) on behalf of its subsidiaries; this has been presented as additional information in the footnotes (EUR 29m as of 31 December 2017). The guarantee has ended as a result of the holding and financing arrangements of Finavias subsidiary LAK real Estate Oy in 2018, as the loans from the era of Civil Aviation Administration have been settled.

²⁾ The maximum amount determined by Government resolution of 17 May 2018 is EUR 59m.

³⁾ The guarantee provided to the EMTN (Euro Medium Term Note) programme of Finnvera Oyj also covers cross-currency rate swaps (nominal amount EUR 8 703m as of 31 December 2018). Derivative instruments are agreed upon under an international, standard-format ISDA agreement, which incorporates a Credit Support Annex (CSA) agreement to reduce credit risk by a collateral arrangement.

⁴⁾ The maximum amount determined by Government resolution of 20 April 2017 is EUR 11 000m.

⁵⁾ The Act on the State-Owned Specialised Financing Company (443/1998) contains provisions on the separation of domestic and export and special guarantees. Domestic losses are covered by the domestic fund, and losses from export and special guarantees are covered by credit, guarantee and venture capital activities under the export and special guarantees fund. The state is responsible for guarantees provided by Finnvera as referred to in the Act on Credits and Guarantees Provided by the State-Owned Specialist Financing Company (445/1998). If the export and special guarantees fund of Finnvera Oyj is not sufficient to cover losses, they will be covered by the National Export Guarantee Fund, which can be supplemented with an appropriation in the budget. Act on the State Guarantee Fund (444/1998).

⁶⁾ Includes existing liabilities. Concurrent liabilities between different guarantees have been eliminated.

⁷⁾ Act on State Guarantees Granted to Companies Engaged in Shipbuilding or Shipowning Operations (573/1972). The total amount of outstanding guarantee credits and hedging instruments provided under the Act at any one time may not exceed EUR 1.35bn. The liability under the Act comprises the guaranteed capital of loan guarantees which have taken effect plus half of the guaranteed loan capital of binding guarantee offers. For non-euro-denominated credit, the amounts are calculated by using the ECB reference rate for the currency in question on the date on which the guarantee is granted. On that basis, the liability was EUR 80m as of 31 December 2018.

⁸⁾ Act on State guarantees and export guarantees granted to industry for investments promoting environmental protection (609/1973). The total amount of outstanding guarantee credits provided under the Act at any one time may not exceed EUR 1bn. The liability under the Act comprises the guaranteed capital of loan guarantees which have taken effect plus half of the guaranteed loan capital of binding guarantee offers. For non-euro-denominated credit, the amounts are calculated by using the ECB reference rate for the currency in question on the date on which the guarantee is granted. On that basis, the liability was EUR 0,00 as of 31 December 2018.

⁹⁾ The maximum amount determined by Government resolution of 20 April 2017 is EUR 440m.

¹⁰⁾ The maximum amount determined by Government resolution on 22 November 2018 is EUR 7,670m. The maximum amount under the resolution consists of Finland's share (1.9289%) of the EFSF programme (EUR 241bn) and an overguarantee of up to 65%. The resolution also includes interest rates and other costs caused by the fund-raising.

¹¹⁾ Act on the State's Export Credit Guarantees (422/2001). The total amount of export guarantees and hedging instruments may not exceed EUR 27bn. The liability under the Act comprises the net liabilities per balance sheet, the existing liabilities, half of offered guarantees, capital, and the ECB reference rate for the currency in question on the date on which the guarantee is granted. On that basis, the liability was EUR 19,108m as of 31 December 2018. For repayments of export guarantees granted by Suomen Vientiluotto Oy, which is part of Finnvera, the risk is covered by the export guarantee granted by the parent company Finnvera Oy. Borrowing by Finnvera Oyj under the EMTN programme is guaranteed by the State. Where State-guaranteed debt is used to fund export guarantees, it does not result in double liability for the state.

¹²⁾ Act on State guarantees for ensuring the supply of basic raw materials (651/1985). The total amount of guarantees for raw materials and protective arrangements may not exceed EUR 0,8bn. The liability under the Act comprises the guaranteed capital of loan guarantees which have taken effect plus half of the guaranteed loan capital of binding guarantee offers. For non-euro-denominated contracts, the amounts are calculated by using the ECB reference rate for the currency in question on the date on which the raw material guarantee is granted. On this basis, the liability was EUR 74m as of 31 December 2018.

¹³⁾ The guarantee was not presented in the appendix to the accounts for 2017.

Government guarantees by currency

Currency	Conversion value	Distribution	Closing rate of exchange
	million EUR	%	€
Euro (EUR)	31 012	74	
US dollar (USD)	9 677	23	1,145
Swedish krona (SEK)	348	1	10,2548
Other ¹⁾	363	1	0
Special drawing rights (SDR)	534	1	0,82356
Japanese yen (JPY)	37	0	135,01
Brazilian real (BRL)	5	0	4,444
Swiss franc (CHF)	0	0	1,1269
Russian rouble (RUB)	0	0	79,7153
Total	41 940	100	

¹⁾ Consists of currencies which cannot be itemised.

Other multiannual liabilities

The itemisation includes commitments with a value of EUR 500,000 or over.

Regular agreements and commitments entered into on the basis of the “Operating Expenditure Appropriations” item of the general provisions of the detailed Budget notes.

million EUR	Budget expenditure 2018	Appropriation requirement 2019	Appropriation requirement 2020	Appropriation requirement 2021	Appropriation requirement post-2021	Appropriation requirement total
Parliament	1	1	1	1	3	7
Government	47	47	47	48	0	141
Administrative branch of the Ministry for Foreign Affairs	7	14	12	6	38	71
Administrative branch of the Ministry of Justice	94	95	83	30	207	416
Administrative branch of the Ministry of the Interior	108	116	92	81	380	669
Administrative branch of the Ministry of Defence	227	233	217	204	197	851
Administrative branch of the Ministry of Finance	254	226	126	73	109	534
Administrative branch of the Ministry of Education and Culture	31	29	24	23	156	232
Administrative branch of the Ministry of Agriculture and Forestry	20	23	13	11	39	86
Administrative branch of the Ministry of Transport and Communications	70	59	23	19	211	312
Administrative branch of the Ministry of Employment and the Economy	31	32	27	22	48	129
Administrative branch of the Ministry of Social Affairs and Health	26	26	17	12	39	93
Administrative branch of the Ministry of the Environment	3	5	3	3	10	21
Regular agreements and commitments total	921	906	687	533	1 437	3 563

Regular agreements and commitments entered into on other basis than the "Operating Expenditure Appropriations" item of the general provisions of the detailed Budget notes

million EUR	Budget expenditure 2018	Appropriation requirement 2019	Appropriation requirement 2020	Appropriation requirement 2021	Appropriation requirement post-2021	Appropriation requirement total
Other agreements and commitments						
Government	1	13	-	-	-	13
<i>Motiva VNK/2261/04/2017</i>	1	2	-	-	-	2
<i>Finlandia Hall VNK/510/04/2018</i>	0	11	-	-	-	11
Administrative branch of the Ministry for Foreign Affairs	-	-	-	-	1 303	1 303
<i>Asian Development Bank AsDB¹⁾</i>	-	-	-	-	417	417
<i>African Development Bank AsDB²⁾</i>	-	-	-	-	360	360
<i>Inter-American Development Bank IDB³⁾</i>	-	-	-	-	230	230
<i>European Bank for Reconstruction and Development⁴⁾</i>	-	-	-	-	297	297
Administrative branch of the Ministry of Justice	12	15	12	9	38	75
<i>Legal Register Centre's decision 14.2.2014 45/018/13.1.4, Data bank (AIPA) main contract Accenture Oy (sub-items 25.10.03, 25.01.29)</i>	4	4	3	2	-	9
<i>Legal Register Centre's decision 14.2.2014 45/018/13.1.3, Data bank (AIPA) main contract Accenture Oy (sub-items 25.10.03, 25.01.29)</i>	0	0	0	0	-	1
<i>Legal Register Centre's decision no. 35/07.02/2017, Data bank (AIPA) CGI (sub-items 25.10.03, 25.01.29)</i>	2	3	3	1	-	8
<i>Legal Register Centre's decision 287/07.02/2018 Commission agreement on conducting the parliamentary elections 2019 (sub-sections 25.50.20, 25.01.29)</i>	-	1	-	-	-	1
<i>Legal Register Centre's decision 25.4.2018 10/07.02/2016 The development project of the resource planning and documentation management system of administrative courts and The Supreme Administration Court (HAIPA) (sub-sections 25.10.03, 25.01.29)</i>	1	2	-	-	-	2
<i>The decision of the Ministry of Justice 21.12.2017 19/26/2017 on giving a public service obligation to guarantee the support services for the victims of crime for the years 2018-2027 according to the Victim Directive (2012/29/EU), Victim Support Finland provided by the Finnish Association for Mental Health (sub-item 25.01.50).</i>	4	4	4	4	24	37
<i>Legal Register Centre's decision 21.12.2011 2/559/2008, Rental agreement on the Sámi Cultural Centre (sub-item 25.01.50)</i>	1	1	1	1	13	17
Administrative branch of the Ministry of Finance	35	25	12	12	16 800	16 850
<i>International Bank for Reconstruction and Development IBRD</i>	-	-	-	-	1 133	1 133
<i>Multilateral Investment Guarantee Agency MIGA</i>	-	-	-	-	8	8
<i>European Investment Bank EIB</i>	-	-	-	-	3 099	3 099
<i>Nordic Investment Bank NIB</i>	-	-	-	-	1 088	1 088
<i>Nordic Environment Finance Corporation NEFCO</i>	-	-	-	-	22	22
<i>Council of Europe Development Bank CEB</i>	-	-	-	-	70	70
<i>European Stability Mechanism ESM</i>	-	-	-	-	11 144	11 144
<i>The Employment Accidents Insurance Act (608/1948) and compensations paid according to the Act on the basis of other statutes 5)</i>	32	23	12	12	186	233
<i>Motor liability insurance compensation paid on the basis of the Motor Liability Insurance Act (279/1959) and the act on rehabilitation payable under the Motor Liability Insurance Act (626/1991) 5)</i>	2	1	1	1	9	11
<i>Collective agreement on the benefit equivalent to group life insurance and compensations paid according to the agreement on the basis of other statutes</i>	1	1	0	0	-	1
<i>Collateral securities, decision of Parliament on the amendment of the Government's borrowing powers (739/2009)</i>	-	-	-	-	30	30
<i>Value of expired and unredeemed bonds as of 31.12.2018, includes capital and interest.</i>	0	-	-	-	11	11
Administrative branch of the Ministry of Education and Culture⁶⁾	21	23	21	20	153	218
<i>Contributions to Unesco (decree 549/1956)</i>	1	1	1	1	1	6
<i>Central government transfer for facility costs, rental agreement of Hanaholmen Cultural Centre</i>	1	1	1	1	5	7
<i>Central government transfer for facility costs, Siida</i>	-	-	-	-	13	13
<i>Decision MV 132/005/2011 and budget 2014 1143/2013 (rental agreement for the National Museum property incl. underground facilities, sub-item 29.80.20)</i>	4	4	4	4	25	38
<i>Decision MV/9/02.07.00/2013 and budget 2014 1143/2013 (Rental agreements on cultural and sightseeing properties, sub-item 29.80.20)</i>	13	15	14	14	108	150
<i>Decision MV/2/02.07.00/2014 and budget 2014 1143/2013 (Rental agreements on cultural and sightseeing properties, sub-item 29.80.20)</i>	0	0	0	0	1	1
<i>Decision MV/3/02.07.00/2015 and OKM 7 670/2015 (Rental agreements on cultural and sightseeing properties, sub-item 29.80.20)</i>	1	1	1	-	-	3

Administrative branch of the Ministry of Transport and Communications	710	716	354	218	213	1 501
<i>The budget's sub-section 31.10.20 Basic transport infrastructure management, points 1 and 2 of the resolution</i>	703	700	353	218	213	1 484
<i>The budget's sub-section 31.10.77 Development of the traffic network, point 1 of the resolution, 31.10.77.3.5 Sea route of Oulu</i>	2	2	-	-	-	2
<i>The budget's sub-section 31.10.77 Development of the traffic network, point 2 of the resolution, 31.10.77.5.2 Other development planning</i>	0	1	0	-	-	1
<i>The budget's sub-section 32.50.40 Activation of local innovations and experiments. 32.50.40.2. Kimola channel</i>	4	14	-	-	-	14
Administrative branch of the Ministry of Employment and the Economy ⁷⁾	1	1	0	-	-	1
<i>Government decree on supporting projects improving the use and state of waters and water environment (714/2015) ESAELY/576/2016</i>	1	0	0	-	-	1
<i>Government decree on supporting projects improving the use and state of waters and water environment (714/2015) KASELY/774/2016</i>	0	1	-	-	-	1
Administrative branch of the Ministry of Social Affairs and Health	9	10	10	10	10	40
<i>Communicable Diseases Act (583/1986)</i>	9	10	10	10	10	40
Other agreements and commitments total	790	804	410	270	18 517	20 001

¹⁾ Callable capital USD 477 235 681; exchange rate EUR 1 = USD 1,145, European Central Bank 31.12.2018

²⁾ Callable capital UA 296 310 000; exchange rate SDR 1 = EUR 1,214, International Monetary Fund 28.12.2018 (UA=SDR)

³⁾ Callable capital USD 263 368 856; exchange rate EUR 1 = USD 1,145, European Central Bank 31.12.2018

⁴⁾ Callable capital EUR

⁵⁾ The annual appropriation requirement is an estimate of the capital value of compensation payments which are payable in the year in question on liabilities accrued at the time of calculation as of 31.12.2018.

⁶⁾ Excludes liabilities from universities' rental agreements. Their total appropriation requirement is EUR 507m (transferable liability according to section 5 of the Act on the implementation of the Universities Act 559/2009). They are presented in Chapter 6 of the year-end accounts of the Annual Report.

⁷⁾ According to section 18 of the Nuclear Liability Act (4884/1972, as amended by Act 581/2011), the liability of an operator of a nuclear installation situated in Finland in respect of nuclear damage caused by any single nuclear incident and suffered in Finland shall be unlimited. Under this Act, the liability of an operator of a nuclear installation situated in Finland in respect of nuclear damage caused by any single nuclear incident and suffered outside Finland shall not exceed 600 million Special Drawing Rights. An operator must take out nuclear liability insurance that covers the maximum liability of 600 million Special Drawing Rights. The Government may, in response to an application, taking into account the size and quality of the installation and the circumstances of the carriage as a whole, determine a maximum amount of liability lower than 600 million SDR but not lower than 5 million SDR. In the case of a nuclear incident in conjunction with transportation of nuclear substance, the operator's minimum liability for damage other than damage caused to the means of transport is up to 5 million SDR. The operator's maximum amount of liability shall not include any interest or any costs awarded by a court. (Section 18 as amended by Act 581/2011 is in force temporarily from 1 January 2012 until the enactment of Act 493/2005 by decree.)

According to section 29 of the Nuclear Liability Act, if a party that is, under this Act or the equivalent legislation of another Contracting State, entitled to compensation for nuclear damage from the operator of a nuclear installation situated in Finland shows that it has been unable to recover the compensation due from the operator's insurer, the outstanding compensation shall be paid by the State. The State's liability for compensation under subsection 1 ceases when the aggregate amount of compensation paid under the insurance and out of public funds totals the maximum liability of the operator under section 18(1).

In addition, Finland is a party to the Brussels Supplementary Convention, according to which SDR 125 million is to be made available from public funds contributed jointly by all the parties to the Convention for damage suffered on the territory of a contracting party (so-called third-tier compensation). Each country's contribution is calculated according to a pre-determined formula as specified in the Convention. The formula is based on GDP and installed nuclear capacity of 8,000 MW. According to recent calculations by the OECD, Finland's contribution to the compensation is just under 2%. Finland's share of the risk burden has been estimated as EUR 5.9 million per nuclear incident in a contracting state.

The State's liability for damage caused by outer space activity and space objects is based on the outer space treaties of the UN to which Finland committed in the 1970s. Compensation of damage caused by space objects is provided for by Article VII of the Outer Space Treaty [Treaty on principles governing the activities of states in the exploration and use of outer space, including the moon and other celestial bodies (SopS 56-57/1967)] and the Liability Convention [Convention on International Liability for Damage Caused by Space Objects (SopS 8 and 9/1977)]. According to the treaties, the state party from whose territory or facility an object is launched, is liable for damage caused by its space objects. The liabilities have so far had no practical meaning for Finland, since it has previously had no outer space activity. However, the situation has changed as the first Finnish satellites have been launched into outer space.

According to section 7 of the Act on Space Activities (63/2018), compensation for any damage caused by a space object shall be paid from State funds, with the exception of damage caused to the operator.

According to subsection 2, the State has the right to recover the compensation paid to the injured party from the operator to the extent that the operator would have been liable for the damage to the injured party under the Tort Liability Act (412/1974).

According to subsection 3, by derogation from subsection 2, if the damage has been caused on the earth or to aircraft in flight or its passenger or crew member, the State has the right to recover the paid compensation from the operator even if the operator had not caused the damage deliberately or negligently as referred to in chapter 2, section 1, subsection 1 of the Tort Liability Act. The maximum amount of the State's right of recourse under subsection 3 is 60 million euros. The provision on the maximum amount does not, however, apply if the operator has failed to comply with this Act or the conditions attached to the authorisation granted under section 5.

According to section 8, the operator shall take out insurance against damage caused by the space activities to third parties at least up to the maximum amount of the State's right of recourse. The Ministry of Economic Affairs and Employment may refrain from requiring the insurance referred to in subsection 1 if

- 1) the insurance of the launching company or a corresponding insurance substantially covers the operator's and the State's liability for damage caused by the space activities to third parties; or
- 2) on the basis of the risk assessment conducted on the space activities as referred to in section 5, subsection 2, paragraph 2, the Ministry of Economic Affairs and Employment can accept the risk of damage caused by the space activities on the earth, in the airspace and in outer space.

The National Emergency Supply Agency's liabilities according to the Safety Stock Act (970/1982) were 8,4 million euros in total and liabilities caused by other longterm contracts were 54,1 million euros in total.

State's pension liabilities

million EUR	31.12.2018	31.12.2017	Change 2017-2016
State's pension liabilities total	92 100	92 600	-500

Pension liabilities refer to the capital value of pension entitlements accrued by 31 December 2018 under the state pension system. When discounting the capital values of pension entitlements, a discount rate of 2.7% has been used as representative of an effective interest rate to exceed future index increases to pension entitlements. For pension entitlements accrued during unpaid periods, the capital value has been calculated as an estimate of the state's share of the expenditure in unpaid periods. Pension liabilities on 31 December 2018 are presented at the 2018 index level.

Pension liabilities on 31 December 2018 are based on an individual-level calculation of the capital value of pension entitlements accrued by 31 December 2017, and they include an estimate of new liabilities incurred in 2018 less discharged liabilities (pension expenditure) taking into account interest.

Funds from the State Pension Fund are not used directly for pension payments; instead, pensions under the state pension system are paid from budget appropriations. The amount transferred annually from the State Pension Fund to the budget for pension expenditure settlement is provided by the Act on the State Pension Fund (1297/2006).

The mark-to-market value of the assets funding the pension liabilities was EUR 18 604 606 023,77 on 31 December 2018. The pension funds assets include an investment portfolio at mark-to-market value, current and long-term receivables, current liabilities, and cash in bank. In addition, the fair value of open derivatives has been taken into account in the valuation of funds assets. The amount of uncovered pension liabilities was approximately EUR 73.5 billion.

The primary statutes on which the liabilities are based are the public sector pensions act (81/2016) and the act on the implementation of the public sector pensions act (82/2016).