

### TOTAL COST OF OWNERSHIP (TCO) (F4.5)

This Form shall be used by the Tenderer to respond to the requirements related to financial proposal as they are described in the specification from tender documents, intended for the description of the components Total cost of ownership (TCO).

The form is structured as follows:

**Table 1: TCO summary** - [table aggregating cost components, detailed in other tables below this form, including for a period of 5 years after the end of the warranty period (single and recurring costs).]

No	Name	Period under contract	Year 2	Year 3	Year 4	Year 5	Year 6	TOTAL (EUR)
1	Licenses for the software solution for an Instant payments system (IPS), including one year of standard support from the manufacturer	174 875.00	n/a	n/a	n/a	n/a	n/a	<b>174 875.00</b>
2	Standard support from the manufacturer for licenses after warranty period *	n/a	110 000.00	110 000.00	110 000.00	110 000.00	110 000.00	<b>550 000.00</b>
3	Implementation services for IPS	375 000.00	n/a	n/a	n/a	n/a	n/a	<b>375 000.00</b>
4	Training services related to IPS	7 000.00	n/a	n/a	n/a	n/a	n/a	<b>7 000.00</b>
5	Warranty services related to implementation of IPS	0.00	n/a	n/a	n/a	n/a	n/a	<b>0.00</b>
6	Man Hours for additional development and change requests during the implementation and warranty period (300 man-hours)	13 125.00	n/a	n/a	n/a	n/a	n/a	<b>13 125.00</b>
7	Post-warranty services for implementation services of IPS, after one year of standard support **	n/a	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
8	Development services, based on change requests in estimated volume of 100 man / hours after the expiry of the warranty period	n/a	7 500.00	7 500.00	10 000.00	10 000.00	10 000.00	<b>45 000.00</b>
<b>TOTAL COSTS</b>		<b>570 000.00</b>	<b>117 500.00</b>	<b>117 500.00</b>	<b>120 000.00</b>	<b>120 000.00</b>	<b>120 000.00</b>	<b>1 165 000.00</b>

\* Description provided in Appendix D: Maintenance Services of the Annex TietoEVERY Tieto Latvia IPS\_SW\_License\_Impl\_Maint\_agr\_CLEAN (a standard (model) licencing Agreement).

\*\* Price will be provided based on Post-warranty implementation job requests from NBM.

**Table 2: Licenses of the IPS software solution**

[All licenses delivered will include in their cost one year of support and maintenance]

Goods	Q-ty	Period	Price per unit	License price	Support and maintenance*		Discount for licenses		Discount for support and maintenance*		TOTAL LICENCES (EUR)	TOTAL SUPPORT AND MAINTENAN CE (EUR)*
					%	EUR						
							%	EUR	%	EUR		
1. Licenses for IPS												
Licenses for the production environment **					100	110 000.00 (standard	-68 %	-325 125.00	100	-110 000.00	174 875.00	0.00

IPS (Limitation: 30 participants***; 5 milj payment messages per/month****)	1	During contract	Licence per IPS for all environments - no licensing per user applies	550 000.00 Licence per IPS for all environments *incl. Production, Test and Back-up environment		price for IPS solution for all modules per year)						
<b>Licenses for the testing environment</b>												
IPS	1											
<b>Licenses for the back-up environment</b>												
<b>IPS</b>	1											
<b>TOTAL</b>				<b>550 000.00</b>		<b>110 000.00</b>		<b>-325 125.00</b>		<b>-110 000.00</b>	<b>174 875.00</b>	<b>0.00</b>

\* 1 Year Warranty period

\*\* Included High-Availability set-up

\*\*\* 1 additional participant (will be applied after 30 participants registration in IPS). One-time Licence Price, EUR 10 000.00

\*\*\*\* 100 000 additional payment messages (will be applied after 5 000 000 messages exceed per / month). One-time Licence Price, EUR 5 000.00.

**Table 3: Implementation services and warranty services (for 12 months)**

Type of service	% in total services	Cost, EUR
<b>I. Implementation services</b>	<b>100%</b>	
Phase 1 - Planning and Clarification: pre-study	9%	34 300.00
Phase 2 - Environment and solution preparation	16%	61 950.00
Phase 3 - Solution preparation on-site and Pilot Go-live	54%	207 900.00
Phase 4 - Pilot of the national system	9%	34 300.00
Phase 5 - Go-live	11%	40 950.00
Phase 6 - Transfer to support/ maintenance mode	1%	2 800.00
<b>II. Warranty services (12 months)</b>	<b>100%</b>	
Warranty services (maintenance and support)	100%	0.00
<b>III. Man hours for additional development and change requests during implementation and warranty period</b>	<b>100%</b>	
300 man hours	100%	13 125.00
<b>Total</b>		<b>395 325.00</b>

**Table 4: Requirements towards infrastructural specifications**

[Infrastructure specifications will be indicated for each lot separately.]

**a. Server configuration in accordance with proposed architecture**

Component	Recommended	Recommended quantity
Name of required component	The recommended model for component, features recommended	The recommended quantity for the component (pcs.)
Primary DC	x86 Compute mashine with CPU 24 + 512 GB	4
Primary DC storage	All flash 10TB x1	1 ( better x2)
Secondary DC	x86 Compute mashine with CPU 24 + 512 GB	4
Secondary DC Storage	All flash 10TB x1	1 ( better x2)
DR DC	x86 Compute mashine with CPU 24 + 512 GB	4
DR DC Storage	All flash 5TB x1	1

**b. Specifications of licenses needed for the database management system and estimated costs**

Product Name	Licensing model (per user, processor etc.)	No of recommended licenses	Estimated costs*
<b>Production environment (Primary DC)</b>			
(Licenses for Oracle EE database)	Per processor	2	Approximately 112 000 EUR for Oracle EE or TietoEVRY can recommend using PostgreSQL as free of charge.
<b>Test environment (Primary DC)</b>			
(Licenses for Oracle EE database)	Per NUP	100	Approximately 25 000 EUR for Oracle EE or TietoEVRY can recommend using PostgreSQL as free of charge.
<b>Production environment (Secondary DC)</b>			
(Licenses for Oracle EE database)	Per processor	2	Approximately 112 000 EUR for Oracle EE or TietoEVRY can recommend using PostgreSQL as free of charge.
<b>Test environment (Secondary DC)</b>			
(Licenses for Oracle EE database)	Per NUP	100	Approximately 25 000 EUR for Oracle EE or TietoEVRY can recommend using PostgreSQL as free of charge.
<b>Back-up environment (DR DC)</b>			
Licenses for Oracle EE database)	Per processor	2	Approximately 112 000 EUR for Oracle EE or TietoEVRY can recommend using PostgreSQL as free of charge.

**Table 5: Cost estimation regarding the licenses for the gateway solution (solutions, implemented on the side of IPS participants, that keep the account balances of end users and can authorize, on behalf of the participant, the debit/credit of end users accounts)**

Business Area	Estimated additional costs to the solution license	Estimated costs for the implementation services	Estimated additional costs for the support and maintenance	Other costs if applicable (to be explained)	TOTAL (EUR)
Gateway solution, implemented on the side of IPS participants	No additional costs for NBM for connection IPS participants (IPS is ready to connect participants). TietoEVERY can help each IPS participant to integrate in the NBM IPS or provide software solution for integration. Costs for each participant depends on bank infrastructure readiness for instant payment processing, volumes, knowledge, etc.	No additional costs for NBM for connection IPS participants (IPS is ready to connect participants). TietoEVERY can help each IPS participant to integrate in the NBM IPS. Costs for each participant depends on bank infrastructure readiness for instant payment processing, volumes, knowledge, etc.	For estimation additional information needed.	No additional costs for NBM for connection IPS participants (IPS is ready to connect participants). TietoEVERY can help each IPS participant to integrate in the NBM IPS. Costs for each participant depends on bank infrastructure readiness for instant payment processing, volumes, knowledge, etc.	For estimation additional information needed.
<b>TOTAL</b>					

**Note:** The information on licensing costs for the gateway solution is for information purposes only and is not taken into account in the financial evaluation.

Valdis Janovs

Evita Ozola

both as Board Members of "Tieto Latvia" SIA,

Tenderer: "Tieto Latvia" SIA

Address: G.Zemgala gatve 76, Riga, Latvia

