



WP4 – T-FORS Demonstration and Evaluation

A. Garcia speaking for all WP4 members

ONERA, NOA, GFP





Task overview



Task and Responsabilities

- Task 4.1 T-FORS functional requirements (T05 T11)
 - Lead ONERA, Participants: NOA, GFP
- Task 4.2 Development, deployment of real-time services (T12 T20)
 - Lead: NOA, Participants: ONERA, GFP, INGV, IAP-L
- Task 4.3 On ground demonstration tests (T18 T22)
 - Lead: ONERA, Participants: GFP
- Task 4.4 Release of final T-FORS services (T20 T24)
 - Lead: NOA, Participants: ONERA, GFP, INGV, IAP-L





Calendar



2023						2024													
M	J	J	Α	S	O	N	D	MJ	F	M	Α	M	J	J	Α	S	0	N	D
T05	T06	T07	T08	T09	T10	T11	T12	T13	T14	T15	T16	T17	T18	T19	T20	T21	T22	T23	T24
Task		**	D4.1																
4.1		✓	(ONE)																
							Task								D4.2				
							4.2								(NOA)				
													Task			D4.3			
													4.3			(ONE)			
															Task				D4.4
															4.4				(NOA)

- Task 4.1 : May 2023 (T5) \rightarrow Nov 2023 (T11)
- Task 4.2 : Dec 2023 (T12) → Aug 2024 (T20)
- Task 4.3 : Jun 2024 (T18) → Oct 2024 (T22)
- Task 4.4 : Aug 2024 (T20) → Dec 2024 (T24)



Implementation 1/3



Task 4.1 - [ONERA, NOA, GFP] (T05 – T11)

Specification of system functionalities.

In this task we will collect requirements based on the participants experience from the operation of ionospheric weather systems and from the design and development of large e-infrastructure projects.

	Public Operator	Premium Operator	Scientist Operator		
Provide alarms	×	×	×		
Provide archived data			×		
Access to database			×		
Provide interfaces	×	×	×		
Provide local real time data	X ₁	x ₂	X ₂		
Provide standardized data format			×		
Performance	×	×	×		

^{1.} Limited resolution

Non-functionnal requirements:

- Legal and regulatory
- Security
- Maintenance
- Infrastructure

D4.1 T-FORS Functionalities will be delivered end of july/beginning of august.

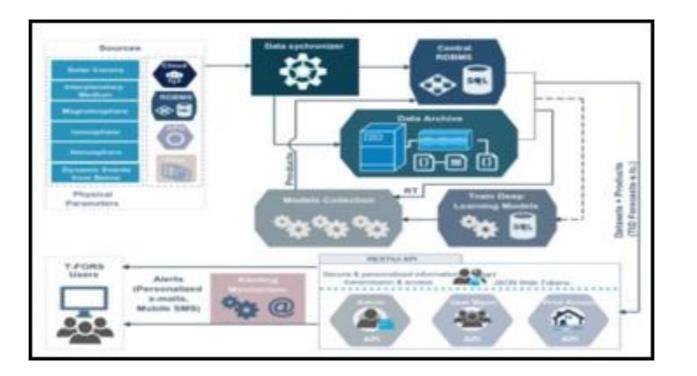
High accuracy data



Implementation 2/3



- Task 4.2 [NOA, ONERA, GFP, INGV, IAP-L] (T12 T20)
- ➤ Based on the initial requirements, the T-FORS services will be designed (MS 8) and developed using the results of the **forecasting models** provided by **WP2 and WP3** and the **functional specifications** (T4.1). => The products will be tested regarding its IT specifications in the T-FORS proof of concept (MS 9)





Implementation 3/3



- Task 4.3 [ONERA, GFP] (T18 T22)
- ➤ ONERA and GFP implement T-FORS services to validate the usability for specific applications concerned Targeted services TRLs : 3-4.

Usability => Availability / Resources management / performances of the service / ...

Ground demonstration tests using HF sources direction finder & HF OTH Radar

For now: first exchanges between ONERA and GFP about NOSTRADAMUS system and GFP's Direction Finder (Plath U646 antennas system) / NOSTRADAMUS system in upgrade (end 2023 low power emission)





- Task 4.4 [NOA, ONERA, GFP, INGV, IAP-L] (T20 T24)
- The results from the on ground demonstrations will guide the release of the final version of the T-FORS services.



Deliverables & Milestones



- D4.1 : T-FORS functionalities report [T08, ONERA] end of July → final revision
- D4.2 : T-FORS prototype [T20, NOA]
- D4.3: Results from on ground demonstrations report [T21, ONERA]
- D4.4: Final version of T-FORS services [T24, NOA]

- MS7: T-FORS IT system initial requirements [T10]
- MS8 : Design of the forecasting products [T14]
- MS9 : T-FORS proof of concept [T18]
- MS14: Specific methodology for setting up the innovation forum [T12]





Thank you for your attention!



The T-FORS project is funded by the European Union (GA-101081835). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Health and Digital Executive Agency (HaDEA). Neither the European Union nor the granting authority can be held responsible for them.