

# WIMAS-6 AMNS data and interfaces in IMAS: status, plans, and future prospects

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This work has been carried out within the transevers of the EURD/Leibe Consortium and has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 633053. The views and agintons expressed herein do not necessarily reflect these of the European Commission.

# Status of your task



- Have an AMNS library which provides standardised access to AMNS data
- Interfaces for Fortran, C, Python, JAVA, MATLAB
- Currently available data
  - atomic processes (ADAS ADF11: ionisation, recombination, charge exchange)
  - nuclear rate coefficients and cross-sections for D-D, D-T, T-T, D-He3
- Examples for each language
- Regression test
- Documentation via doxygen

## **Deliverables**



D1: Maintenance and updates of AMNS interfaces.

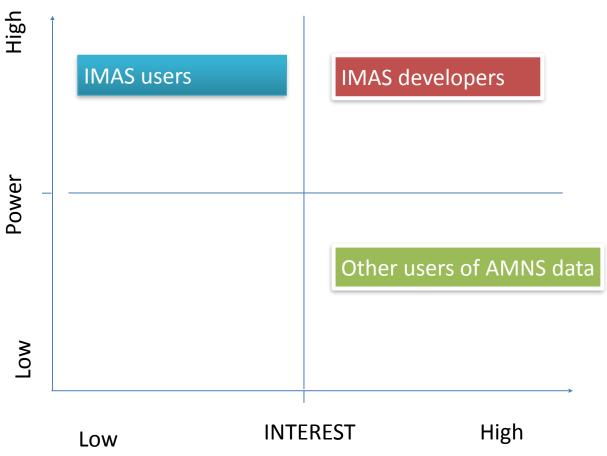
D2: Recommendation, provision and importing of new data, and checking of existing data: cross section data, mixed material data, surface mixing models, nuclear cross-section data

## Plans for 2020



Identification of Key Stakeholders for your Task





### Plans for 2020



#### Requirements of Key Stakeholders for your Task

#### **IMAS** Developers

- Documentation must be available
- Required data must be available
- Access should be easy
- Library should be sufficiently fast
- Backward compatibility should be ensured

#### **IMAS** Users

- AMNS library should be invisible most of the time
- Provenance should be available

#### Other users of AMNS data

- Documentation should be available
- Publications

# **Timeline for 2020**



## 2020 Timeline for your task

	Q1	Q2	Q3	Q4
David Coster	Task Coordination; library maintenance			
Viorica Stancalie	provide datasets (as raw data or in different formats: adf04, for population processing and further emissivity code adf15)			
Erik Andersson Sunden	identification and deficiencies in the data		provision of anisotropic nuclear cross section data	
David Tskhakaya	Recommendation, provision and importing of new data, and checking of existing cross section data			
Karoly Tokesi	Provide and verify cross-section data on demand			
Martin O'Mullane	Provision of beam-stopping data		Provision of spectral emissivity data	