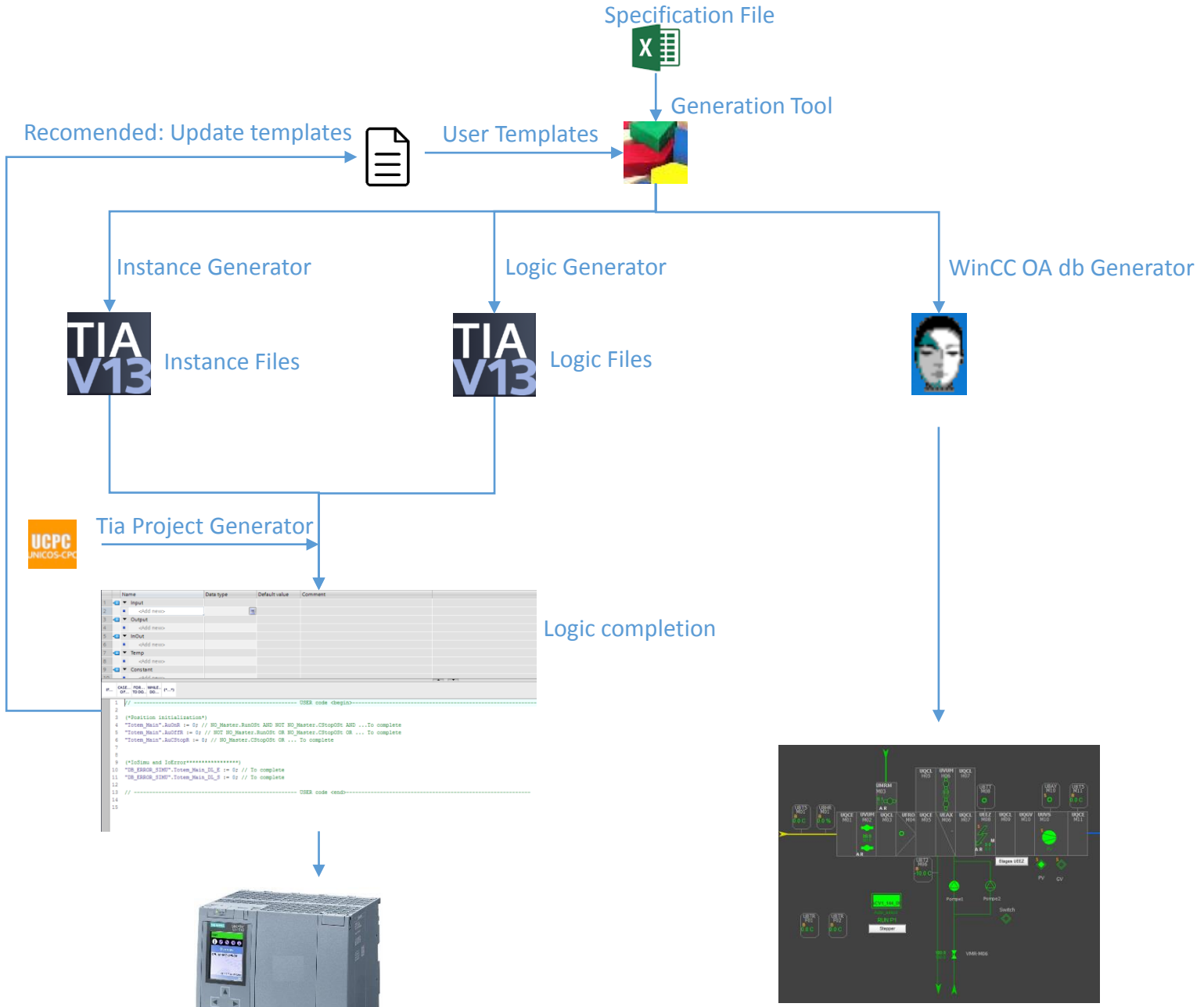
# TIA Portal in CPC

UCPC Team

# TIA Portal in UAB

- At the moment support only for S7-1500 PLC series
- S7-300/400 PLCs will be supported in next releases
- TIA command line interface developed by PCS section


Specification File
Generation Tool
Recomended: Update templates
User Templates
Instance Generator
Logic Generator
WinCC OA db Generator
TIA V13
Instance Files
TIA V13
Logic Files
UCPC UNICOS-CPC
Tia Project Generator
Logic completion

# TIA Portal in UAB: workflow

1. Empty project
2. Import tags
3. Import Baseline
4. Import Instances
5. Import Logic
6. Generate OBs
7. Renumber blocks
8. Compile Hardware
9. Compile Software
10. Load PLC

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Take initial empty project containing only **hardware** & **network** configuration.

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Import tag table (generated .xlsx file) or add tags manually in the project.

Tags are „like” symbols – assign names to pieces of memory.

**However**, mapping between block names and numbers is not possible!

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1. Import Sources to „External Sources” folder in the TIA Project structure
2. Generate blocks from imported sources
3. Compile generated blocks

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WinCC OA needs to know addresses of communication data blocks...

...but TIA Portal does not provide any solution to assign them automatically

Solution = TIAcli + mapping file

```
DB_WINCCOA : 100;
DB_SCHED : 101;
DB_COMM : 102;
DB_ERROR_SIMU : 103;
DB_EventData : 104;
DB_Diagnostic : 105;
DB_PAValue : 106;
```

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TIA Portal project UAB plug-in

# TIA Portal in UAE

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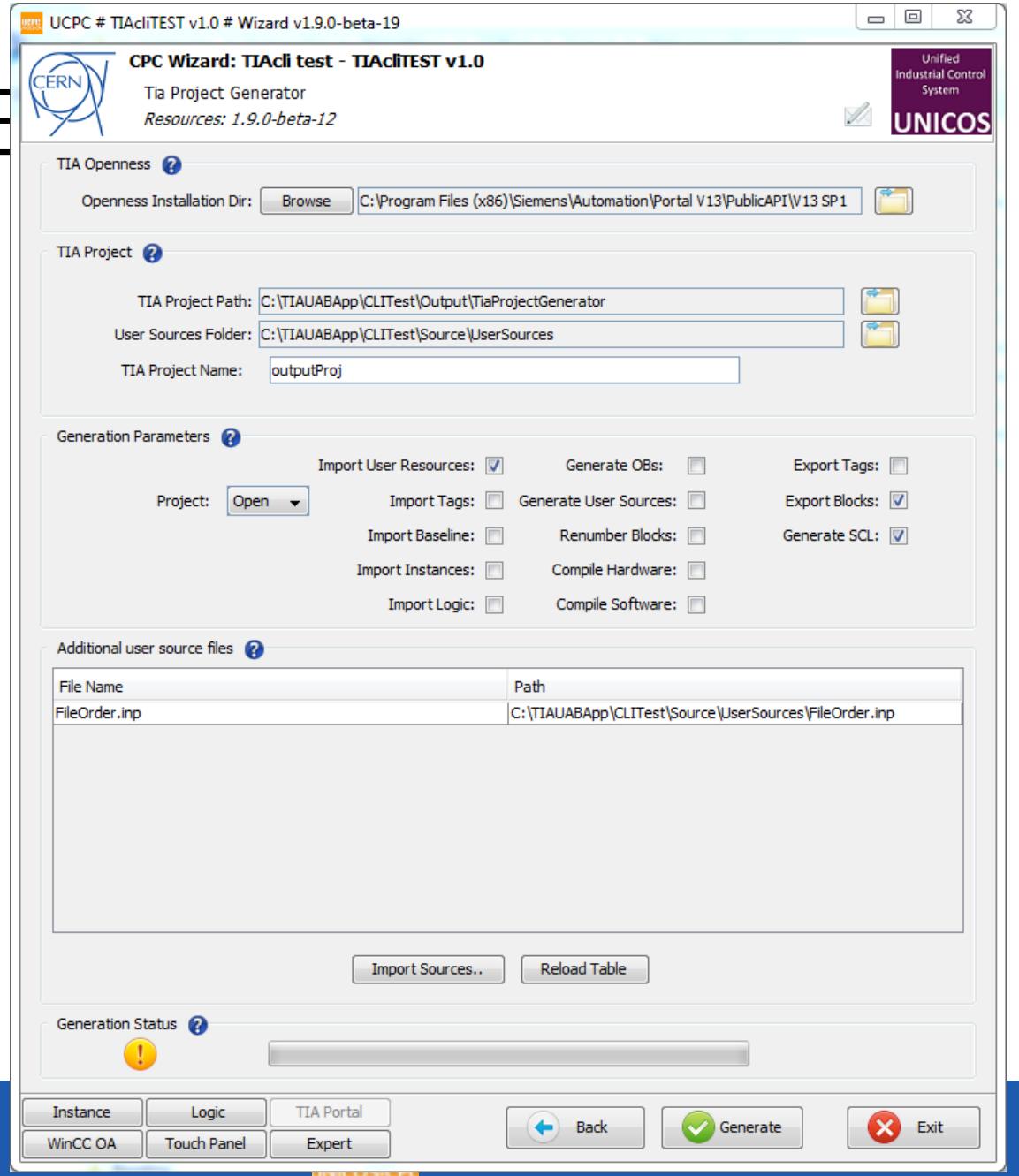

# Future plans

- Add support for S7-300/400 PLCs
- Remove UNICOS-optimisation object blocks for S7-1500 PLCs
- Use symbolic addressing instead of absolute addressing
- Turn on memory optimization on the PLC side (S7-1500)
- Research whether can support S7-1200 PLCs
- Improving TIAcli using the new openness features