
Proposal for Enhancing ETSAP New User Experience

Presented by
Gary Goldstein - DecisionWare, Inc.
On behalf of the ETSAP Training Team

Energy Research Centre, University of Cape Town
Cape Town, South Africa
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Project Description

- ETSAP TIMES training workshops have become an integral, nearly self-funded, semi-annual activity run alongside the main ETSAP workshops. However, a revamp of the training approach and material is long overdue.
- What is proposed is a series of incremental enhancements to the training and associated material that build upon one another, broken into three phases as discussed below.

Justification

In accordance with the Annex VII Objectives

- c) *Capacity building* - Best practice examples, manuals, online forum and hands-on training opportunities will be offered with the aim of maintaining/improving international/national capabilities for conducting energy systems analyses and the effective use of ETSAP tools.

Benefits

Enhanced learning experience for newcomers (and advanced modelers), including ETSAP Partners, leads to

- Better modelers and models, assembled more quickly
- Increased participation in ETSAP sponsored training workshops
- Prospects for webinars, particularly for intermediate and advanced modeling techniques
- Lower support burden

Phase I: Revamp and Improve the ETSAP TIMES Introductory Training Course

1. Complete base & intermediate incremental ETSAP-Demo model(s) with VEDA-TIMES
 - Design/define a complete standard RES that evolves to expose features of TIMES from a RES/process perspective
 - Suite of data templates that expose concepts a step at a time by expanding the RES, based upon “best practices” [that is, don’t try to show all the variations/possibilities - rather just those attributes and approaches employed most often]
 - provide links to E-TechDS for the future technology characterizations, to the extent possible
 - maximum of 50 technologies
 - Complete VBE sets/tables
 - Series of scenarios showing important RES components/policies that require more sophisticated modeling techniques (e.g., retrofit and life extension, early retirement, RPS targets, feed-in tariffs, CAFE, EE goals, cross-sector (region) emissions trading), as well as elastic demand
2. Construct the same incremental model in 1. under ANSWER-TIMES
3. Revamp the ETSAP 3-day basic/introductory training course so that common sessions cover the TIMES basics/theory (e.g., some math, temporal dynamics, multi-region, user constraints - in split sessions (intro/rest)), an overview of Demo model RES and data requirements, and VEDA-BE, with parallel sessions for VEDA-FE and ANSWER

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Phase II: Greatly Enhance the Basic Documentation for New Users

4. Prepare ETSAP-Demo model documentation & roadmap, along the lines of a Users’ Guide
 - Compose a brief TIMES intro/"theory" and common RES section so that a Users' Guide is self-contained
 - [Update the new ANSWER-TIMES Getting Started Manual to use the ETSAP-Demo model, in conjunction with 2.]
 - VEDA-FE
 - revisit the Tutorial manual updating for new ETSAP-Demo
 - update VedaSupport using new ETSAP-Demo
 - Prepare the VEDA-BE section
 - Prepare a series of “exercises” some done during the Training, but more importantly to be done afterwards, with (animation) answers (posted on the ETSAP www training section)

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Phase III - Prepare a TIMES Primer, Advanced Features, and Other Tangential Activities [follow-on]

5. Advanced Modeling How Toes
 - Examples and discussion of other most often used TIMES variants and features (e.g., multi-OBJ, stochastics, climate)
 - Consider disseminating by means of an additional (last) day of training (at non-IEW meetings), or better yet give as a series of x-hour webinars
 - Prepare documentation supporting these topics
6. Improve the introductory TIMES documents [subsequently]
 - TIMESDoc-Details.pdf would benefit from updating and from incorporating some of the material in some of the TIMES User Notes, so as to minimize “disconnects” between what is in this important ETSAP-TIMES document and what the user experiences when using VEDA or ANSWER.
 - Result would be a TIMES Primer tied to the ETSAP-Demo model explaining the underlying mathematics a step at a time
 - Expand this to include the intermediate/advanced feature in 5. so as to cover all the ETSAP-Demo material
7. Integration of the training material into the website [to be done in conjunction with a separate proposal for revamping and improving the ETSAP website]
8. Train additional trainers

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Deliverables

Phase I [VEDA and/or ANSWER]

- 1) ETSAP-Demo model incremental RES description and corresponding VEDA templates and VEDA-BE database [E-TechDS sheet links, but no download of default data]
- 2) ANSWER-TIMES model based on 1
- 3) Detailed syllabus for the 3-day course, perhaps presentation material

Phase II [VEDA, plus ANSWER, if I.2 pursued]

- 4) User guide (PDF and web presents) as described above

Phase III [follow-on]

5. Advanced features and techniques
6. New documentation
7. Integration of training material in www
8. More knowledgeable trainers

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Timeline

Phase I

1. 4-months
2. 2-months from I.1, some done in parallel
3. 6-months

Phase II

4. 6 months, after the completion of Phase I

Phase III

- 5-8. to be determined

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Funding Requirements [VEDA Only]

Improving the ETSAP Training Materials & Courses							
Phase I	Amit	Antti	Gary	Kathleen	Ken	Mauri	TOTAL
Module 1 - Revamp and improve the ETSAP TIMES Introductory Training Course	10	0	2	5	0	16	33
Complete base-intermediate incremental ETSAP-Demo model(s) with VEDA-TIMES	6,000 €	0 €	1,200 €	3,000 €	0 €	9,600 €	19,800 €
Module 2 - Revamp and improve the ETSAP TIMES Introductory Training Course	0	0	0	0	0	0	0
Construct the same incremental model in 1. under ANSWER-TIMES	0 €	0 €	0 €	0 €	0 €	0 €	0 €
Module 3 - Revamp and improve the ETSAP TIMES Introductory Training Course	2	0	5	10	0	10	27
Revamp the ETSAP 3-day basic/introductory training course	1,200 €	0 €	1,200 €	6,000 €	0 €	6,000 €	16,200 €
LoE Subtotal	12	0	7	15		26	60
Phase I - funding	7,200 €	0 €	4,200 €	9,000 €	0 €	15,600 €	36,000 €
Phase II	Amit	Antti	Gary	Kathleen	Ken	Mauri	TOTAL
Module 4 - Greatly enhance the basic documentation for new users	2	0	5	15	0	10	32
Prepare ETSAP-Demo model documentation & roadmap, along the lines of a Users' Guide	1,200 €	0 €	3,000 €	9,000 €	0 €	6,000 €	19,200 €
LoE TOTAL	14	0	12	30	0	36	92
Total Modules 1-4 Funding	8,400 €	0 €	5,400 €	18,000 €	0 €	21,600 €	55,200 €

¹⁴¹ All experts have accepted the same reduced daily rate of 600€/day.

¹⁴² Antti prefers to have time for these activities included as part his TIMES maintenance contract.

¹⁴³ Three days of LoE from Gary's ETSAP LO contract will be devoted to these activities.

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Funding Requirements [ANSWER Only]

Improving the ETSAP Training Materials & Courses							
Phase I	Amit	Antti	Gary	Kathleen	Ken	Mauri	TOTAL
Module 1 - Revamp and improve the ETSAP TIMES Introductory Training Course	0	0	0	0	0	0	0
Complete base-intermediate incremental ETSAP-Demo model(s) with VEDA-TIMES	0 €	0 €	0 €	0 €	0 €	0 €	0 €
Module 2 - Revamp and improve the ETSAP TIMES Introductory Training Course	0	0	3	0	15	0	18
Construct the same incremental model in 1. under ANSWER-TIMES	0 €	0 €	1,800 €	0 €	9,000 €	0 €	10,800 €
Module 3 - Revamp and improve the ETSAP TIMES Introductory Training Course	0	0	2	0	7	0	9
Revamp the ETSAP 3-day basic/introductory training course	0 €	0 €	1,200 €	0 €	4,200 €	0 €	5,400 €
LoE Subtotal	0	0	5	0	22	0	27
Phase I - funding	0 €	0 €	3,000 €	0 €	13,200 €	0 €	16,200 €
Phase II	Amit	Antti	Gary	Kathleen	Ken	Mauri	TOTAL
Module 4 - Greatly enhance the basic documentation for new users	0	0	3	0	15	0	18
Prepare ETSAP-Demo model documentation & roadmap, along the lines of a Users' Guide	0 €	0 €	1,800 €	0 €	9,000 €	0 €	10,800 €
LoE TOTAL	0	0	8	0	37	0	45
Total Modules 1-4 Funding	0 €	0 €	4,800 €	0 €	22,200 €	0 €	27,000 €

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Funding Requirements [Full]

Improving the ETSAP Training Materials & Courses							
Phase I	Amit	Antti	Gary	Kathleen	Ken	Mauri	TOTAL
Module 1 - Revamp and improve the ETSAP TIMES Introductory Training Course	10	0	2	5	0	16	33
Complete base-intermediate incremental ETSAP-Demo model(s) with VEDA-TIMES	6,000 €	0 €	1,200 €	3,000 €	0 €	9,600 €	19,800 €
Module 2 - Revamp and improve the ETSAP TIMES Introductory Training Course	0	0	3	0	15	0	18
Construct the same incremental model in 1. under ANSWER-TIMES	0 €	0 €	1,800 €	0 €	9,000 €	0 €	10,800 €
Module 3 - Revamp and improve the ETSAP TIMES Introductory Training Course	2	0	7	10	7	10	36
Revamp the ETSAP 3-day basic/introductory training course	1,200 €	0 €	4,200 €	6,000 €	4,200 €	6,000 €	21,600 €
LoE Subtotal	12	0	12	15	22	26	87
Phase I - funding	7,200 €	0 €	7,200 €	9,000 €	13,000 €	15,600 €	52,200 €
Phase II	Amit	Antti	Gary	Kathleen	Ken	Mauri	TOTAL
Module 4 - Greatly enhance the basic documentation for new users	2	0	8	15	15	10	50
Prepare ETSAP-Demo model documentation & roadmap, along the lines of a Users' Guide	1,200 €	0 €	4,800 €	9,000 €	9,000 €	6,000 €	30,000 €
LoE TOTAL	14	0	20	30	37	36	137
Total Modules 1-4 Funding	8,400 €	0 €	12,000 €	18,000 €	22,200 €	21,600 €	82,200 €

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