

Quality Assurance on a Major Energy Systems Analysis Project in South-East Asia

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Topics

- Introduction
- Elements of Quality Assurance Deployed
- Project Metrics
- Some Conclusions
 - Caveat 1: non-commercial aspects
 - Caveat 2: respect confidentiality

Introduction

- Role of Technical Advisor
- Overview of Project Design
- Outline of Project History

Technical Advisor

- Adviser to donor (not teams)
- Technical assistance by Contractor
- Quality assurance - dialogue with teams
- Attend major technical and management meetings
- General independent resource
- Perspective = counterpart benefit

Project Design

- Formation of teams, formal stakeholder groups, installation of H'ware, S'Ware
- Training & assistance (sequential rounds)
- Baseline databases and updates
- Exchanges within region and to Australia
- Formal Policy Study Reports (3)

Other Project Design Features

- Developing country context
- Regional project basis central to the donor
- Asean 5 plus Regional Host (later extended by 3 Aseans)
- Strong overlay of donor project documentation and planning
- Strengthened Quality Assurance features after project suspension

Project History

- Commenced March 1999 as 4 yr project
- Key staff resign late 1999- suspension 2000
- Stock-take Mission late 2000/early 2001
- Modification to design- retender process
- Re-start February 2002
- 3 newer Aseans added (2004 -)
- Project near completion (Nov 2005)

Elements of Quality Assurance

- Formal Project Planning Rounds
 - Research, Training and TA, Exchange Plans
- QA Plan and Performance Monitoring Framework
- Internal Peer Review of formal studies
- Technical Assessment on major outputs

Technical Assessment reports to Donor

- Assessment of Annual Planning Documents
- Database Inspections and Team Visits
- Assessment of Policy Study Reports- National and Regional

Database inspections and Team visits

- Visit rounds to 5 national and regional team
- Lodgement of databases and documentation
- Discussion - team, senior Govt rep, (donor post)
- Report to donor agency
- Desk Assessment for extension teams

Regional Database Development

- Latest national models incorporated (sometimes with adjustment)
- Additional data
 - non-participant countries and trade regions

Criteria for Policy Reports

- Progress in Proficiency in processes and techniques
- Understanding of model capacity and limitations
- Design of policy scenarios and cases
- Interpretation and discussion of model results
- Reproducibility of results and comparisons with other studies

Improvement Observed in Policy Reports

- Conclusions supported by model results
- Results properly reported in the tables or text
- Interpretation of conclusions consistent with results

Selected Metrics

- End Use Demands (minor structure, forecasts upgraded)
- Energy Carriers (substantial development)
- Technologies (major growth)
- User Constraints (now mainly reflect multiple scenarios)

Metrics : End Use Demands

• Country	Baseline	Mar04	2005
• Country A	95	60	96
• Country B	62	84	84
• Country C	73	75	75
• Country D	41	41	44
• Country E	74	74	74

Metrics : Energy Carriers

• Country	Baseline	Mar 04	2005
• Country A	176	220	377
• Country B	35	76	94
• Country C	53	58	96
• Country D	45	54	74
• Country E	29	42	55

Metrics : Technologies

• Country	Baseline	Mar 04	2005
• Country A	667	573	950
• Country B	147	376	507
• Country C	267	301	552
• Country D	144	212	315
• Country E	185	261	326

Metrics : User Constraints

• Country	Baseline	Mar 04	2005
• Country A	95	19	60
• Country B	1	28	59
• Country C	8	16	46
• Country D	1	8	28
• Country E	2	23	55

Conclusions- Team Skills and Model Development

- Overall excellent progress by most teams
- Much improved facility and understanding
- Calibration improved
- More questioning needed internally
- Documentation needs (Teams agreed)

Conclusions - Policy Study Reports

- All significant topics
- Considerable team effort and engagement
- Quality of several studies was commendably high.
- Emerging follow-up research agendas
- Significant regional collaboration in Regional Studies
- Overall regional technical achievement impressive

To Conclude

- Need for technical QA for this scale project
- Project Achievements principally earned by the participants
- Despite developing country context, some excellent technical progress
- A formal Quality Assurance framework has helped
- Some Issues noted for Markal Software