Session 2: Engaging Stakeholders

- JODTool: better Requirements Traceability
  - Correspondence NL – VDM based on parts of speech
- Animation for All!
  - Ease of Acccess: lively, cloudly, webly.
  - PVSio-web: graphical animation plus verification tools
- Better verification
  - Supporting extensibility

Ways Ahead: Engaging Stakeholders

Stakeholders	SHORT (1)	MEDIUM (5)	LONG (10)
Requirements Engineers		"Idea to Code" in Overture	
Domain Experts	Web access to tools. Wide range of tools Support gradual implementation	Supports more impln languages	Dynabook of VDM: • Live spec • VDM spec and code on dynamic medium • VDM spec for all!
Domain Experts	Web based version of the toolset • Better integration with the PVSio-web toolkit	Modelling templates • Possibly supported by verification strategies	Trusted toolchain • From requirements to code
Expert Modellers (?)	• Verification support • Connect with others	• Semantics of VDM++ • 1000 downloads • Broaden developer base	• Continuous verification

Some Discussion Points

- VDM4Requirements: links to other “pre-formal” techniques?
- The trusted toolchain – is it a proof of concept or is there really a user community?
- Extensibility: is this a general issue we should address?
- The future of verification: managing prover feedback

Session 3: Future of Overture (1)

- 1 year
  - Georgios; “clear” its features, focus on impact
  - Miran; more expressive RT architecture primitives
  - Morten; code generation for embedded systems

Future of Overture (2)

- 5 years
  - Georgios; bigger user base and developer community; significant industrial impact
  - Miran; code generation for target hardware;
  - Morten; industry strength libs for code generation; more complex architecture models (buses); integrated model management; faster interpreter

Future of Overture (3)

- 10 years
  - Georgios; well established industry tool
  - Miran; wider life cycle coverage
  - Morten; exponential growth (1E5 downloads)

Session 4

- Fuyuki: Test Driven Development + new notion of refinement
- Martin: Pacemaker using Crescendo technology with DSE
- Marcel: ESA model-based systems engineering in early phases (TASTE)

Future perspectives

- 1 year
  - Fuyuki: demos and tooling
  - Martin: fault models
  - Marcel: “loose weight” + VDM-RT system -> AADL model + OO semantics
- 5 year
  - Fuyuki: Leave students just with Overture
  - Martin: HIL + more pacemaker development
  - Marcel: “get more attractive” + MSc/PhD studnets mash-up plan + integrate other techniques + join forces + on-line courses
- 10 year
  - Fuyuki: Valuable function that cannot be imagined yet
  - Martin: VDM-RT formal semantics + static analysis of timing properties
  - Marcel: ?? + increase visibility + “code flying in space”