Project Management

Models and methods deployed by Conpleks

CONPLEKS INNOVATION

Overview

- Project types
- Project phases
- Reporting
- Documentation

Project types

Research projects

- New technology
- Experimentation and learning
- Project scope may vary from start to end
- Dynamic set of requirements
- Unexpected benefits common
- Typically an agile development model approach

Development projects

- Known technology
- Ability to define deliveries from project start
- Static set of requirements
- Focus is on delivering the expected outcome in time and on budget
- Typically a waterfall development model approach

A Conpleks project may start as a research project in the first stage and end as a development project in a second stage

How we work at Conpleks

Four phases of the development process

Project phases

- **Analysis Phase –** To ensure that the development project is kicked-off correctly, we start by doing a thorough, professional analysis of the product and project, focusing on:
  - implementation proposals
  - relevant technologies
  - required development tasks
  - associated risks
- **Study Phase –** In the study phase, we create an overview of the various ways to reach the goal. When we have found the most suitable way, we prepare a product proposal and a project plan, including:
  - overall design and technologies
  - suggested components and designs
  - time plan, budget and success criteria
  - required resources and competencies
- **Development Phase –** In the development phase, we perform the actual product development. This normally consists of:
  - determination of the final design – both high-level and detailed
  - execution of the actual design projects
  - co-ordination of parallel project-tracks, for example, hardware, software and mechanical design
  - choice of test equipment and definition of test environments
- **Conclusion Phase –** Before project completion, Conpleks Innovation does the following:
  - assessment of production- and product quality
  - clarification of the supply chain
  - handling of product certifications
  - design of packaging material, if required

Project framework

The framwork for the project is initially defined in the Project Initiation Document (PID), comprising:

- Business objectives and project objectives
- Project scope
- Assumptions and constraints
- Success criteria
- Organization, Authorities & Stakeholders
- Primary aspects of the solution
- Project plan, time plan, shipment plan, roadmap
- Project documentation
- Administrative procedures
- Quality ensurance
- Risk management
- Patent options

Requirements handling

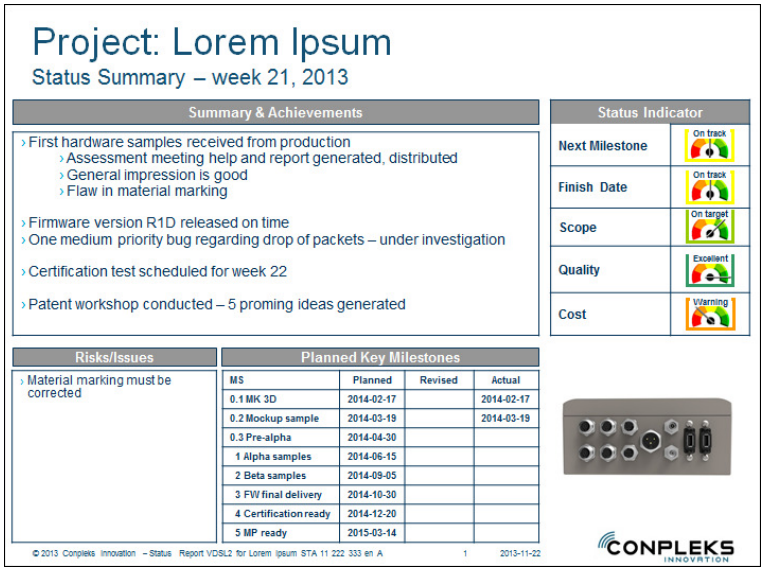
- System requirements may be provided by the customer as project input, or they may be derived by Conpleks as part of system analysis/design
- System requirements are captured by a Main Requirement Specification (MRS) which is handshaked with the customer
- Requirement fulfillment is tracked with the Statement of Compliance (SoC)
- Test are specified with a defined test strategy and related test specifications, matching the system requirements (Statement of Testability, SoT)
- Test results/approvals are documented with the Statement of Verification (SoV)
- Requirement documents (MRS, SoC, SoT, SoV) are based on templates designed by Conpleks

Example of MRS template

ID ref. no.	Date entered / date modified	Requirement Source	Requirement Title	Requirement Text	HW / SW / MECH / ALL	M / R / O	Phase 1	Phase 2	Comments
MRS 102001	08-12-2011	1/10 FCP 101010	Lorem ipsum dolor sit ame	Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.	HW/SW	M	Comply	Comply	
MRS 102002	21-02-2012	1/10 FCP 101011	Lorem ipsum dolor sit ame	Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.	HW/SW	M	Comply	Comply	
MRS 102003	21-02-2012	1/10 FCP 101012	Lorem ipsum dolor sit ame	Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.	HW	M	Not Comply	Comply	
MRS 102004	22-03-2012	1/10 FCP 101013	Lorem ipsum dolor sit ame	Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.	HW	M	Comply	Comply	
MRS 102005	30-11-2011	1/10 FCP 101014	Lorem ipsum dolor sit ame	Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.	HW	M	Not Comply	Comply	
MRS 102006	21-02-2012	1/10 FCP 101015	Lorem ipsum dolor sit ame	Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.	HW/SW	M	Comply	Comply	
MRS 102007	04-03-2012	1/10 FCP 101016	Lorem ipsum dolor sit ame	Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.	HW/MECH	M	Comply	Comply	
MRS 102008	22-03-2012	1/10 FCP 101017	Lorem ipsum dolor sit ame	Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.	HW/MECH	M	Not Comply	Comply	
MRS 102009	21-02-2012	1/10 FCP 101018	Lorem ipsum dolor sit ame	Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.	HW/SW	M	Not Comply	Comply	

Project reporting

- Periodic status reporting on results and issues
- Single slide dashboard for fast overview
- Ressource usage overview as burndown charts



Project: Lorem Ipsum

Status Summary – week 21, 2013

Summary & Achievements

› First hardware samples received from production
  › Assessment meeting help and report generated, distributed
  › General impression is good
  › Flaw in material marking

› Firmware version R1D released on time
› One medium priority bug regarding drop of packets – under investigation

› Certification test scheduled for week 22

› Patent workshop conducted – 5 proming ideas generated

Status Indicator

Next Milestone	On track
Finish Date	On track
Scope	On target
Quality	Excellent
Cost	Warning

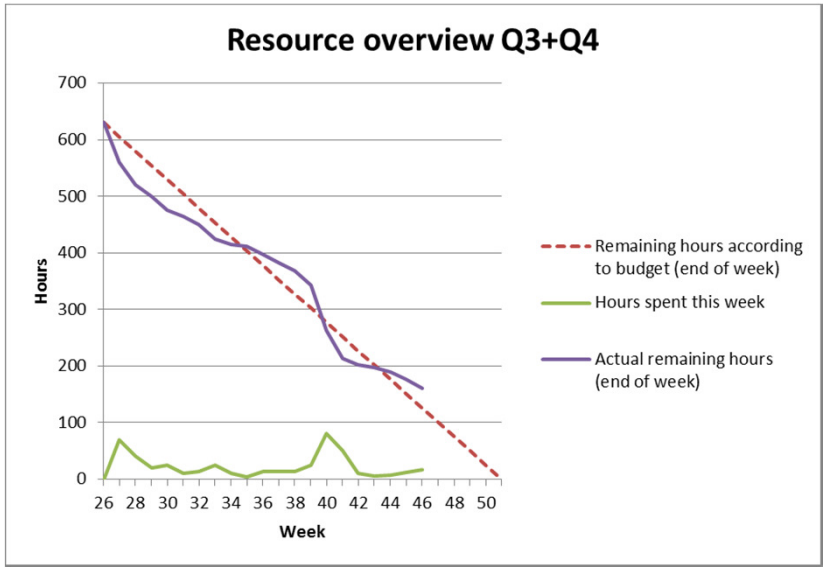
Risks/Issues

› Material marking must be corrected

Planned Key Milestones

MS	Planned	Revised	Actual
0.1 MK 3D	2014-02-17		2014-02-17
0.2 Mockup sample	2014-03-19		2014-03-19
0.3 Pre-alpha	2014-04-30		
1 Alpha samples	2014-06-15		
2 Beta samples	2014-09-05		
3 FW final delivery	2014-10-30		
4 Certification ready	2014-12-20		
5 MP ready	2015-03-14		

 1 2013-11-22



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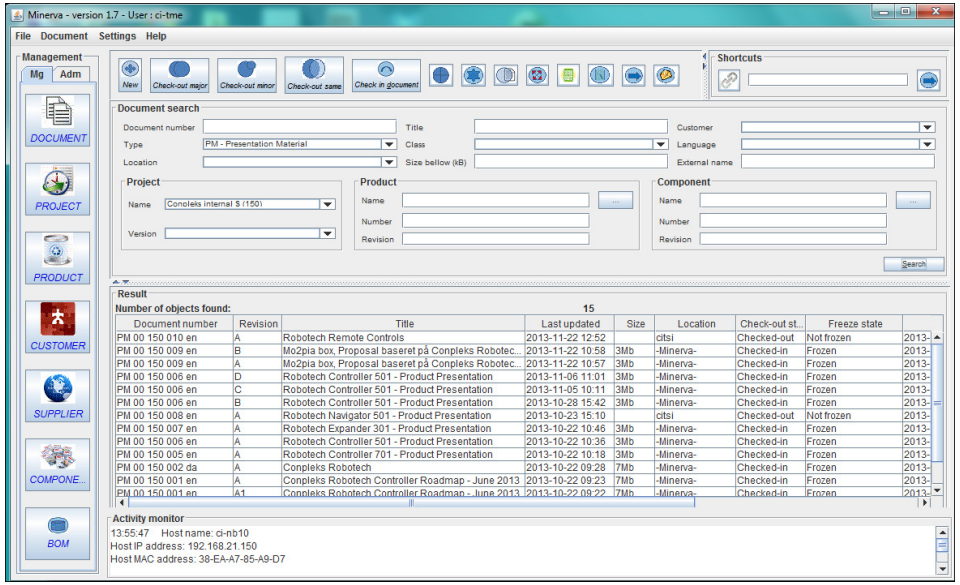
Documentation

- Conpleks uses a dedicated documentation storage system (”Minerva”) supporting revision control
- All project related documentation is stored with dedicated customer reference
- Backup supported



About Conpleks Innovation

Conpleks Innovation is based in Struer, Denmark, and operates worldwide. Our customer base consists of both small domestic companies and large international corporations.

Depending on the nature of the task, we can involve an entire network of competent hardware, software and mechanical design professionals.
This way, we can assign appropriate resources, find the best solutions and create a successful product.

Contact us

You are always welcome to contact us and discuss how we can help you to develop your idea – partly or fully – depending on your needs.

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