First glimpse
Key issues in current system

- Language enhancements
- Layout
- Unicode
Consequences

- New parser and IDE
- New meta files
- New runtime system (DEP)
Research

- Platforms
- IDE / Parser
Development platform

- The platform that the Blaise developers use
- Choice
  - .NET
Design platform

- The operating system where the Blaise development system will run upon
- Choice
  - Windows, using .NET framework 3.5
Runtime platform

- The operating system where Blaise instruments run upon
- Choices
  - Windows, with .NET 3.5
  - Browsers, with Silverlight 2.0
IDE/Parser

- Microsoft Visual Studio Extensibility (VSX)
- Actipro Components
- DSL tools
- Gold Parser
- ANTLR
Phase 1

- **Scope**
  - Datamodels
  - New control centre
  - New source files
  - New parser
  - New meta files
  - Layout
  - Compatibility
Phase 1: Datamodels

- Focus on datamodels
  - No Manipula/Maniplus
  - No CATI
  - No additional tools (Bascula, Delta)
Phase 1: New Control Centre

- Using Actipro components
  - Flexible
  - Reinventing the wheel 😞
  - Integration with new parser
  - Source Code Editor
  - Graphical Datamodel Designer
Phase 1: New source files

- New format (.blax)
  - SQLite database
  - Can contain main source file as well as include files
  - Can contain additional information
Phase 1: New parser

- Using ANTLR
  - Define grammar of the Blaise language
    - Not very easy
  - Some small changes to the language (no layout statements anymore)
Phase 1: New meta files

- New format (.bmix)
  - SQLite database
  - Extensible
Phase 1: Layout

- WYSIWYG approach
  - Powerpoint interface
Compatibility

- **Language**
  - Existing 4.x datamodels can be used

- **Behaviour**
  - Behaviour is the same as in 4.8

- **Data**
  - Data is interchangeable with 4.8

- **Idea:**
  - Reuse of the Blaise 4.8 API Service
Architecture
Phase 1: ToDo

- Stabilize current product
- Import tool
- Template designers
- Documentation
- Installation
- Test with real datamodels
- Incorporate user feedback
Phase 2 and beyond

- Rewrite Rules Engine
- Data storage
- Language enhancements
- Localization
- Manipula
- Event language
- Multimode support / Case Management
- Debugger
- Paradata
Milestones

- End of this year: CTP (result of Phase 1)
- Next IBUC: First production version