PODS 7.0/Next Generation
Top Ten Questions About PODS 7.0/PODS Lite

Todd Patterson, Buckeye Partners, LP
What is PODS Lite?

• The basis for PODS 7.0 (a subset of PODS 7.0)
• Shows progress towards PODS Strategic Goals
• Released as a proof-of-concept
• Provides testing & R&D for PODS 7.0
• Provides users a taste of the upcoming PODS 7.0
• Supports esri APR format (**NOTE: esri APR is NOT required to use**)
• Supports Relational versions (Oracle, SQL Server, POSTGres)
• All the tables are part of PODS Lite and are found in PODS 7.0
What is PODS 7.0?

- The actualization of the Next Generation effort as a complete data model
- Released as the starting place or foundation for all future data models
- Supports esri APR format (NOTE: esri APR is NOT required to use)
- Supports Relational versions (Oracle, SQL Server, POSTGres)
- The complete PODS 7.0 data modules will be the 7.0 + new modules
  - to be developed later (Q4 and beyond)
- All the tables are part of PODS 7.0
**What is the difference between PODS Lite and PODS 7.0?**

<table>
<thead>
<tr>
<th>PODS Lite</th>
<th>PODS 7.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>First glimpse at Next Generation PODS - released for testing and R&amp;D and to provide a flavor of the 7.0 model</td>
<td>PODS Lite + additional tables = PODS 7.0 Data Model (result of Next Generation Effort)</td>
</tr>
<tr>
<td>All the tables in PODS Lite are part of PODS 7.0</td>
<td>An expanded set of tables, attributes, domains and relationships that builds on the PODS Lite offering providing the ‘basis’ to expand the model with Modules</td>
</tr>
<tr>
<td>The Basis of PODS 7.0 (a subset)</td>
<td>Contains ALL of PODS LITE plus more</td>
</tr>
<tr>
<td>FREE!</td>
<td>Requires current PODS Membership to access and use</td>
</tr>
</tbody>
</table>
Will LITE change?

Will PODS Lite change as the 7.0 model is developed?

• Yes, there will be some changes to tables and attributes in PODS Lite as a result of the release of PODS 7.0

• All changes to PODS Lite will CEASE once PODS 7.0 is released

• Once PODS 7.0 is released, changes to PODS Lite ‘should’ only be additive and in-sync with PODS 7.x updates

• PODS Lite 1.x will become PODS Lite 7.0 at the release of PODS 7.0 and will remain in-sync with the PODS 7.0 release versioning
The one thing that confuses me is the terms – PODS Next Generation, PODS Lite, PODS 7.0 Model – Help!

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next Generation</td>
<td>the initiative to transform the data model</td>
</tr>
<tr>
<td>PODS Lite</td>
<td>the first release, as a POC and to support APR (strategic), a subset of 7.0</td>
</tr>
<tr>
<td>PODS 7.0</td>
<td>the basis of all future PODS model work and is the initial release of the PODS 7.0 Model</td>
</tr>
<tr>
<td>PODS 7.0 Model</td>
<td>the 7.0 tables, the Data Exchange Specification and any additional tables that are developed in future, to be determined and yet to be released MODULES</td>
</tr>
</tbody>
</table>

The reason for these different terms is because data models and supporting documentation aren’t created instantly – we needed to move forward and show progress.
### What is the Road Map?

What is the PODS road map for data models, versions and styles?

<table>
<thead>
<tr>
<th>Model</th>
<th>Support &amp; distribute</th>
<th>Develop</th>
</tr>
</thead>
<tbody>
<tr>
<td>PODS for use with esri Spatial Model – new tables</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>PODS Legacy</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>PODS Relational Models 6.1 &amp; 6.2</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>PODS Lite</td>
<td>yes</td>
<td>As part of 7.0</td>
</tr>
<tr>
<td>PODS 7.0</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>PODS 7.0 Modules (Require 7.0)</td>
<td>yes</td>
<td>Absolutely!</td>
</tr>
</tbody>
</table>
Wait or Migrate now?

What data model should operators pick? – Wait or move forward?

• If you need to make a decision now, ask yourself - Why?
• If you still need to make a decision now, then choose one:  
  – PODS Relational, PODS esri Spatial, PODS Lite 1.x, UPDM or wait for PODS 7.0

Some benefits that we think make PODS 7.0 compelling
• Data Exchange Specification and the Module Architecture Rules
• Will support a wide variety of implementations
• DES will support migrations
PODS or UPDM?

What model should I use – PODS or UPDM?

– Whichever one is best for you.

• Both are viable and useful within the pipeline industry

• Both support ArcGIS for Pipeline Referencing (APR) and a geometric network deployment

Questions to Ask Yourself:

Do you use esri GIS software as its GIS technology stack?

Are your pipelines mostly distribution/gathering or transmission?

Are standards important to your operating paradigm?

Do you want to participate in development & growth of the data model?

Is it important that PODS table names and attributes are more recognizable in the pipeline industry?

Talk with esri staff, PODS Technical Committee members or Service Providers
Will there be documentation?

Is there better documentation on the Location Model?

- Yes!

- esri APR Documentation (http://www.esri.com/arcgis/products/extensions/pipeline-referencing)

- The Conceptual Logical Data Model for PODS Lite
- The PODS Lite Technical Overview and GUIDE
- The PODS Lite Geodatabase Data Dictionary
- PODS Lite Geodatabase Configuration for use with ArcGIS for Pipeline Referencing (APR)
Is there more straightforward documentation about the model?

- Yes!
Why isn’t a classic ERD delivered with the PODS Lite/7.0 Model?
Old to new mapping process?

What is the mapping process going to look like from PODS 4.x/5.x/6.x to PODS 7.0?

- Generate a PODS 7.0 Schema that matches the tables in your PODS 6.0 database
- Generate a PODS DES Schema, and Mapping File from the PODS 7.0 Schema
- Fill out the DES mapping file to map tables, attributes and domains from your PODS 6.0 to the generated DES schema
- Write the scripts or tools or engage with a service provider to move the data from your database to the DES and then from the DES to the PODS 7.0 database
The process ...

PODS 6.0 or earlier data model

Next Gen Data Model (GDB or Relational)

Logical Model

DES Schema (xml)

DES Schema Validation (xsd)

DES Mapping File (txt)

DES (Data) (xml)
Do I need ESRI APR to use PODS Lite or PODS 7.0

- No!

• PODS Lite and PODS 7.0 utilize the same table structure for managing centerlines and linear referenced networks as esri APR *but they do not require esri APR to function*

• PODS Service Providers and operators can develop their own processes, routines and software for managing data in PODS 7.0 format if they choose.
PODS 7.0 & esri APR

- But ...

**esri APR is NOT Required for PODS Lite or for PODS 7.0**

- PODS 7.0 and PODS Lite have the tables in the model that will allow implementation with esri APR without any modification to the data model
- But PODS 7.0 or PODS Lite **do not require esri APR** for data editing or management
PODS 7.0 Recap

• PODS Lite v1.1 will be released within the month
  - full Geodatabase, APR, Oracle, MS SQL Server, Postgres RDBMS

• Two module groups have started working
  - call for volunteers in Jan., start-up in Mar.

• Updates to PODS 7.0
  - Hierarchy, Metadata, Assets, Conditions, Locations and Operations

• Data Exchange Specification (DES)
  - XML based data and schema transfer data format for data exchange between software, systems and databases

• Full documentation on how to extend the model through modules
  - one document rather than multiple