

XML Work Paper From Mark Perrin, PanCanadian Petroleum

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Risks: There is no guaranteed service level yet. IPv6 supports quality of service but is only beginning to be adopted. Transfers are subject to delays and outages.

GISB scope:

Risk: GISB standards are voluntary. Currently membership is focused on the US, Canada and Mexico. There is nothing in the GISB charter that prevents international firms from adopting its standards. In the US certain standards have been adopted by the Federal Energy Regulatory Commission (FERC) and those standards are now mandatory for the US Interstate pipelines. If XML standards are not required by the regulatory agencies, companies may require multiple interfaces to do the same kind of business with compliant and non compliant partners.

Lower Application Development Cost:

Benefits:

XML should enable reduced costs for development of interfaces between applications. However, there is still a large dependency on C++ and Java development skills for the applications that use the content transferred via XML. If the XML standards are broadly adopted, there will be a saving in the cost of translations because they will be done in a standard way.

Validation:

Benefit: XML enables validation of the schema, structure, relationships and dependencies of the content but does not enable validation of the actual content.

Risk: You could receive a valid XML data stream full of garbage numbers.

Readability:

Benefit: XML is easily readable and parsible.

Risks:

There is increased overhead in parsing and validating XML data streams which could slow large data transfers.

The data is more readable by humans but this can lead to misinterpretation by someone who thinks they know how to read it.

It is easier to tamper with the content of an XML data stream.

Opportunities:

Members that adopt the XML standards will be easier to establish B2B with because they will be able to respond quicker to changes. Those that don't may lose market share.

Standardizing may enable automation of some trading and transportation functions.

Since ERP and supplier management applications are tending to use XML, its use in trading and transportation systems will enable easier interfacing with these other enterprise systems.

Standardizing metering devices to send XML data streams instead of proprietary protocols would simplify the use of meter data.

XML is being adopted as a storage structure for other applications like word processors. This will enable sharing of additional types of data between applications.