The Problem

Baggage management is rapidly evolving, with new processes being continuously introduced. The current messaging standards, which have been in place since 1985, do not provide an easy way to support baggage system integration and innovation.

Baggage message failure or rejection are major causes of baggage mishandling, impacting customer service, and extra cost upon the industry. Airlines and airports end up investing efforts and resources to resolve messaging issues.

As well as preparing the industry for a more cost efficient and flexible future, numerous other benefits would flow from moving away from today’s out of date practices.

The Solution

A new messaging standard is being developed, based on established best practices and will allow future developments at a reasonable cost using technology that is almost universally adopted in other industries.

IATA’s Baggage Steering Group (BSG) has identified the problem and sponsored the creation of a Baggage XML sub-Working Group to revisit the current information exchange model and develop XML based messaging standards that correspond to today’s industry requirements. The group operates within the Passenger and Airport Data Interchange Standards (PADIS) framework to ensure consistency and interoperability with other airline messaging standards with the strategic direction determined by the BSG.

Group members already include numerous airports, airlines, and major IT providers. Airlines and airports involved in IATA baggage activities and IATA Strategic Partners are encouraged to join this effort to ensure that the resulting standards meet industry-wide requirements and to start implementing the new standards.

What is XML?

“eXtensible Mark-up Language” (XML) provides a powerful and standardized approach for describing, capturing, processing and publishing business information. Each of its elements integrates a description of the purpose. It is structured by categorizing information, therefore when XML information is received, the receiving device is given the instructions of usage and storage.

Why XML?

This enables much simpler processing to take place, and the task of “parsing” the information (putting it into a form that is usable by the receiving device) is unnecessary. Once a message is created in XML, all the devices in an enterprise (or wider environment if the same information structure is adopted extensively) can carry out their work simply, without having to reinterpret the message from scratch. XML is also inherently protected against becoming obsolescent, because the structure allows for extension from time to time, when new practices require new information to be carried. The rules governing the practices and development of XML are defined by W3C (World Wide Web Consortium), a respected international body that is not aligned to any particular vendor or product.
The Benefits

Cost saving

The current procedures and standards in baggage handling require the use of hardware and software to capture and analyse information at every interface, which is both inefficient and expensive. Because XML carries its schema with it, this extra processing disappears.

The standardised nature of the software and practices for implementing systems using XML will simplify the route for supplier companies to enter the market place, thus increasing competition and keeping costs down.

Operational Improvement

An intelligently designed information model, and its XML schema, will allow easier integration of the information across an airline’s operations, resulting in fewer gaps in information captured about passengers, bags and other goods. It should be possible in the future, for example, to find the passengers that have "problem bags", rather than just the bags themselves.

Data quality will improve with the adoption of XML, leading to fewer failures in messaging, and fewer bags mishandled. This is because XML messaging is more clearly defined, and less costly to keep up to date.

Current parsing practices can result in messages being misinterpreted which leads directly to customers having their bags mishandled. New practices and innovation within the field – such as the Electronic Bag tag – will continue to develop. Because of the extensible nature of XML, it will be far easier and cheaper to adopt innovation than at present, particularly when compared with making changes to the current "legacy" DCSs (Departure Control Systems).

How to Participate?

You are welcome to join the Baggage XML working group. The group has already started developing their understanding of the current and likely future processes that must be supported, and will proceed to the implementation of a conceptual model, prior to coding a standard in XML.

Working group members should be prepared to attend one web conference a month, 1-2 face-to-face meetings a year, and spend up to one day a month to understand and contribute to group’s activity. No technical XML knowledge is required to participate since the group’s main function is to document detailed business requirements. Current members include Business Analysts, Enterprise Architects, Business Architects, and Business oriented individuals from baggage ground operations.

Please contact the Baggage XML Working Group secretary -- baggageservices@iata.org -- for more information.