

Latest News from Odette International

As the New Year gets under way, I would like to welcome you to the first Odette Outlook newsletter of 2009 which gives a snapshot of just a few of the latest happenings in the world of Odette, including the launch of several important new services.

During these particularly difficult times *its business as usual* for Odette. It makes even more sense for us all to work together on standards and recommendations which can help improve performance and reduce costs in the automotive supply chain. Our Logistics and Technical Committees will be holding events over the coming months to identify what the industry needs and how we can help. We must take the opportunity to think outside the box and hope to generate some significant innovations. Please let us know how we can help you.

This year sees the 25th Anniversary of the founding of Odette and, to mark the occasion, we will be holding a special event towards the end of the year. More information will be available over the coming weeks.

In the meantime, I look forward to meeting many of you over the coming months and hope you find our newsletter of interest.

With best wishes

John Canvin
Managing Director

Change of Chairman and new Board Members

John Sobeck stepped down from the Odette Board of Directors last year at the end of his three years' term as Chairman, which coincided with his promotion to Vice President and Corporate Head of Logistics at ZF Friedrichshafen. John led the Board with great skill, helped to raise the profile of our activities wherever he went, and firmly believed in the value of working together at the European and Global levels.

We are very pleased to introduce the incoming Chairman, **Philippe Paban** from Renault in France. Philippe is Vice President for Manufacturing and Logistics Information Systems and brings a broad range of knowledge and experience in technology to the Board.

"I am very honoured to have been selected as the Chairman of Odette. During the past few months I have been very impressed by the diversity and excellence of recommendations made by the Odette project teams, in collaboration with the National Automotive Organisations. The scope of these standards goes far beyond the traditional electronics exchange format to include for example new technologies, Supply Chain performance improvement tools and security issues. These recommendations are more and more critical, especially as our Industry is facing significant challenges", said Philippe.

We also warmly welcome to the Board **Sabine Hucke** from Fehrer representing the German Automotive Industry, **Ingrid Lundberg** from Volvo Logistics representing Sweden, **Koldo Urabain** from Mercedes Benz in Spain and **Kevin Dimmelow** representing UK. A complete list of the Directors, their affiliations and positions in their companies is shown below.

| National Organisation | Board Member | Company Position |
|-----------------------|----------------|---|
| GALIA (France) | Philippe Paban | Vice President, Manufacturing & Logistics IS, Renault |
| ANFAC (Spain) | Koldo Urabain | CIO, Mercedes Benz |

| | | |
|-----------------------|-----------------|--|
| VDA (Germany) | Sabine Hucke | Central Logistics Director, Fehrer |
| Odette Sweden | Ingrid Lundberg | CIO, Volvo Logistics |
| Odette Czech Republic | Michal Netti | IT Director |
| SMMT (UK) | Kevin Dimmelow | Business Development Director, SMMT-Industry Forum |

Security Certificate Exchange Recommendation (SCX)

Odette has just published its Recommendation for Security Certificate Exchange, which was driven by the need to better manage security certificates in exchanges between trading partners.

The use of Security Certificates has become an important part of data exchange in the automotive industry. They are used to provide proof of identity of the partners, allow encryption/decryption/integrity check of files and ensure non-repudiation of data exchange.

However, the large number of Security Certificate providers has made it increasingly difficult to properly manage the exchange, validation and installation of these certificates.

The Odette SCX project team, led by **Dr Stefan Seufert** of Robert Bosch, has carefully analysed the business requirements and technical opportunities. They have developed a recommendation to establish trust between the business partners and enable the automated exchange and renewal of Security Certificates.

The technical means to implement the recommendation is a Trust service Status List (TSL). This will be the basis of a new Odette on-line service. Click [here](#) for more details.

See also the news about plans for Odette to become a [Certification Authority](#).

Odette Trust Service

A typical TSL contains details of Security Certificate providers (aka Certificate Authorities or CAs) and their status. For the automotive industry, a positive identification is recommended and the Odette TSL will contain the names of the trustable CAs. It will be published and updated on the internet and can be easily accessed by enabled software systems. To ensure the integrity of the TSL, the list itself has to be signed with a digital signature of the institution creating and maintaining it, in this case Odette.

Business partners, receiving Certificate information from other partners may now automatically check the trustworthiness of the issuing CA. All recommended parts of the trust system are based on international standards (namely ISO – International Standardisation Organisation, ETSI – European Telecommunication Standards Institution, IETF - Internet Engineering Task Force (RFCs) and ITU – International Telecommunication Union standards).

According to the various security levels required by different business processes, there can be several trust lists, each of them containing details of the issuing CAs complying with the policy requirements for a particular security level.

So far, two levels have been identified:

1. **Basic level** – The issuing CA is an authenticated business entity and operates a Public Key Infrastructure (PKI).
2. **OFTP2 level** – The issuing CA is listed in the Basic TSL (i.e. fulfils the basic requirements) and additionally complies with the OFTP2 Security Certificate Policy requirements.

The industry partners participating in the SCX project (OEMs, suppliers and solution providers) consider it absolutely crucial that the TSL and the related service are provided by a neutral body. They recommended Odette to be this trust guardian (or Trust Bridge) and to provide the service to the automotive community. This was fully endorsed by the Odette Board of Directors.

For operational and administrative purposes it was recommended that two bodies be established:

1. **SCX Administration** – the body which is responsible for running and maintaining the service. The Odette Central Office will fulfil this role.
2. **SCX Committee** – the body which deals with exception situations. This might occur, for example, where a CA is found to be no longer compliant with the security level. The SCX Committee will take decisions on necessary corrective actions on behalf of the Automotive community. The Committee will consist mainly of representatives of OEMs and suppliers.

The service is provided on an open basis. Any interested CA can apply to be listed on the Odette TSLs. Odette will do the necessary validation of the existence of the CA. The compliance to the so far defined security levels will be verified by self-assessment of the applying CA.

The establishment and maintenance is provided for the benefit of the Odette members and the whole Automotive community.

With the provision of the Trust Service Odette strengthens its position as an organisation of the Automotive Industry working for the Automotive Industry. Acting as a trust guardian, Odette provides an essential service to the community which is in line with Odette's mission as a 'business enabler' for electronic data exchange in the European Automotive Industry.

Most importantly, the SCX recommendation and the resulting TSL facilitates the large scale implementation and use of the new OFTP2 file transfer protocol for secure data transfer over the Internet (see separate [article](#)).

The Odette Trust Service will go live shortly.

If you want to know more or would like your company to be listed as a trusted CA please contact: info@odette.org

OFTP2 Homologation and Implementation

Following the launch of the new **OFTP2** implementation guidelines at the end of last year (click [here](#) for the story), VOLKSWAGEN AG has decided to 'go live' with OFTP2 and is inviting suppliers to start EDI data exchanges via **OFTP2**. Pilot tests are also being carried out between a number of other OEM-Supplier partnerships.

We believe that it is very important to our members that we ensure interoperability of **OFTP2** systems and a good choice of **OFTP2** software in the future. We are therefore

introducing a process of homologation to validate the compliance of **OFTP2** software to the Odette specifications.

As soon as the internal testing between companies in the project team is completed we will make the homologation service available to any potential provider of **OFTP2** software. The testing will include the test cases laid out in the document entitled **OFTP2** Interoperability Tests which can be found at:

<https://forum.odette.org/support/oftp-oftp2>.

Upon satisfactory completion of the homologation process the vendor will be issued with a certificate, their name and product will be listed on the Odette website and they will be able to use the special Odette **OFTP2** logo on their product and in their marketing.

Companies, which are currently participating in the homologation process, are Axway Inc., Data Interchange Plc., Numlog, Seeburger AG, SSC-Services GmbH, Trubiquity GmbH, T-Systems Enterprise Services GmbH and Xware AB.

At the leading edge, the Swedish Automotive Industry is about to implement **OFTP2**. It has been announced in Sweden and other Scandinavian countries that the ISDN service is to be stopped in 2010 and therefore a replacement of the large number of existing OFTP connections has become a vital task. To support this migration, Odette Sweden is providing training and support to companies in the region. The next course in English will be held in May in Stockholm. For more information please click [here](#).

Companies wishing to request **OFTP2** software homologation or who need more information should contact: oftp2@odette.org.

The release of OFTP2 and the SCX recommendation gives an ideal opportunity for Odette to be involved as a **Certification Authority** (CA) in its own right. The aim is to provide highly secure certificates to the automotive industry which can be used with OFTP2 exchanges, as well as a number of other applications.

Downloadable electronic certificates will be offered in the first instance to safely recognise individuals, departments in companies etc. Eventually smart-cards and USB dongles (which carry digital certificates) may be offered.

This new service completes a suite of tailor-made offerings, which together provide a single access 'one-stop-shop' for security protocols, guidelines and related certificates and codes for the automotive industry. Users will be able to have full confidence in dealing with an independent non-commercial organisation like Odette, supported by European vehicle manufacturers and suppliers.

The on-line automated **Certification Authority** service will be launched during April 2009.

For more information go to: info@odette.org

OSCAR: The definitive business entity code for the Automotive Industry

Odette is responding to the growing needs for unique identification in the Automotive Industry and will shortly be launching the **OSCAR** service. **OSCAR** stands for the '**O**dette **S**ystem for **C**oding **A**nd **R**egistration'. The **OSCAR** service will deliver a high quality solution which meets the requirements for unique identification in Auto ID/RFID, OFTP and EDI, and at a later date, UPIK (Unique Part Identification Key) and the Odette Partner Identification Database (PID) recommendation.

In the future, **OSCAR** will also provide the possibility for the exchange of partner related data via EDI (using XML messages).



OSCAR will:

- **issue codes for use in:**
 - AutoID/RFID
 - Consignment ID (Licence Plate)
 - Asset ID (e.g. Containers)
 - Product ID (Parts Marking)
 - EDI messaging
 - Technical Partner ID (Sender/Receiver)
 - Business process related Party ID (NAD ID)
 - File transfer station identification (OFTP)
- **maintain Business Entity Datasets**
- **provide Business Entity Datasets for use in Partner Databases**

Odette is already officially recognised as a Code Issuing Organisation within two of the most relevant and influential ISO standards in the area of unique identification:

- ISO 15459 – Information Technology – Unique Identifiers (Parts 1 – 6)
- ISO 6523 – Data Interchange – Structures for the identification of organisations (Parts 1 & 2)

The Odette Code, recognised by both of the above standards, consists of 4 alphanumeric characters which will be used to identify main business organisational units (legal companies and individual business units).

There is also the possibility (recognised by ISO 6523) to add a 2 character alphanumeric suffix to the main 4 character code in order to identify sub-entities. Odette will use this suffix to allow companies to register individual codes for sub-organisations (e.g. receiving locations, loading docks, purchasing department, invoicing function, etc) within their main business organisations.

Organisation codes are often used in the automotive industry as a key element in the identification of various entities, for example:

- Trading partners
- Locations, business functions and departments within a company
- Logistics handling units
- Company assets
- Individual parts/components
- Computer network addresses
- Engineering changes
- and more.....

Currently, there is a very confused and heterogeneous situation within the industry, with companies identifying the above entities using a mixture of their own organisation codes and codes provided by external organisations such as Dun & Bradstreet or GS1/ePC.

Companies have to maintain a large number of codes of varying formats and lengths. Even if these codes can be understood in individual trading relationships, there is no way that they can be understood by other parties in the Supply Chain, such as logistics service providers, customs officials, network providers etc.

There is a growing need for a unique identification of these entities linked to factors such as:

- More stringent traceability requirements
- Increased incidence of automatic data capture (especially using RFID)
- Introduction of new technology demands on unique identification are growing. If you want to use RFID, or a License Plate on labels, it is mandatory to use unique identification.

OSCAR is an easy to use web-based system. The combination of user-driven Odette recommendations and a professional, cost efficient service, provides a major added value benefit to our Industry.

If anyone is concerned about having to make costly internal changes, the introduction of the **OSCAR** code will not require an immediate change of running systems in companies. It can be applied in areas where the need is most urgent (e.g. returnable container identification) and then extended to other applications as required.

OSCAR is currently undergoing final testing and will go live from April 2009. It will be accessible worldwide from the Odette and National Organisations' websites. In the meantime, if you have any questions or want to know more, please contact: info@odette.org

EDIFACT Message Validation Portal

It can often be a struggle for suppliers to implement EDIFACT messages, especially for the first time.

Following the successful experience of Odette Sweden with the suppliers of Volvo and Scania over the past two years, Odette International is shortly to launch a new on-line portal where companies around the world can carry out a check of their JAIF Global Invoice and Global Despatch Advice messages before they go into service.

By encouraging their suppliers to use this service, customers will be relieved of time-consuming and frequently misunderstood communications with individual suppliers concerning the results of EDI tests.

Suppliers will receive understandable, reliable information, including indications of errors, for use in correcting their EDI implementation. They can gain their customer's authorisation to send production messages sooner and thus benefit from accelerating the invoicing and/or despatch advice process.

The web-based validation of Global EDIFACT messages will become available by the end of February 2009 providing:

- A new value added service for our members
- Promotion of Global EDIFACT messages, including emerging markets
- Potential extension to include customer specific guidelines

The Odette Validation Portal is mainly aimed at those companies who want to be sure that the messages they are going to send - in a migration scenario, for example - are free of errors. The message sender can use the Odette Validation Portal service to validate messages, created by his EDI system, against the respective Global Automotive EDIFACT Message Implementation Guidelines. The system can also be used to check the quality of services provided by an external provider, e.g. when the EDI system has been set up or configured by an external service provider.

As a starting point, the available options are Global INVOIC (invoice message) and the Global DESADV (despatch advice message). These are the most frequently sent messages from the supplier to the customer.

The online availability facilitates the testing at the pace of the implementation project. In the test the user only interacts with the web portal, no test partner at the other end is required. Messages are simply uploaded to the system, and test reports are generated online. Thus, one can avoid the typical bottleneck situation that could often be faced with Help Desks.

Other benefits of the Portal include:

- 24/7 availability permits use in both national and international commerce
- Low-cost tool with high value benefits
- No installation or training costs for participants
- Time spent locating errors is drastically reduced by human readable custom error messages
- User-friendly solution increases user acceptance of EDI introduction or migration
- Web-based solution is easily accessible to SMEs
- Tests include syntax and business rules compliance checks
- Business rules are included in the tests to verify plausible content. This eliminates an error source that is especially troublesome and time-consuming to deal with
- Integrated human-readable documentation of the reference specification increases comprehension and accelerates troubleshooting.

The Portal is provided in cooperation with GEFEG, a Berlin based company who have supplied IT consultancy and EDIFACT tools to Odette for many years.

You can access the new service through the Odette home page and if you have any questions contact: info@odette.org

Where are we with RFID in Odette?

RFID has been used for many years in automotive, mainly in closed systems with more focus on active than on passive tags. During the last 6-7 years, business sectors such as commercial distribution, retail and aviation have taken the lead in the usage of low cost passive RFID tag technology for open systems.

The global automotive industry has recently been catching up, well aware of the potential for improving traceability, with an initial focus on using RFID for returnable container tracking and parts marking.

This had been done at the European level in Odette and in the RFID working group of the Joint Automotive Industry Forum (JAIF). The JAIF was created to promote electronic information standardisation in the automotive industries of Japan, the U.S., and Europe.

Odette has been actively involved since 2005 in developing RFID standards for the automotive industry. Much of the initial input came from the German automotive industry through the VDA, but the journey has been much longer than we all expected.

We are now close to publishing our European guidelines and we are also working in parallel on complimentary guidelines which will be published globally under the JAIF.

Why did it take so much time? We believe the main reasons are:

- The subject is very new for many people and highly technical, with experts thin on the ground.
- Political issues (the question of EPC or ISO) have created confusion and much debate in the industry

- ISO standards were found to contain many uncertainties and getting a common interpretation has not been easy
- Technology has moved on rapidly, but it has been worth waiting for. We now have more “automotive friendly solutions” available in the shape of UHF tags with larger memory

RFID for Returnable Transport Items (RTIs)

Work on the Odette recommendation for RFID with RTIs is soon to be completed and published. This document is based upon the VDA 5501 recommendation and widens its applicability across Europe. The recommendation will focus mainly on the business processes, but will also describe how data can be stored in the tag memory.

To make sure that our recommendation will take into account all the relevant automotive needs, we recently carried out a survey to check that the encoding space in the tag is large enough to contain the various packaging type coding schemes that will be in use for at least the next five years.

Global RFID for Returnable Transport Items

In parallel with the Odette recommendation we are working on a set of global guidelines with our colleagues from AIAG, JAMA and JAPIA. This focuses more on the technical aspects of RFID usage.

If the individual members of the automotive industry anticipate the use of RFID between enterprises in the future and hope to build on these logistics systems, it was felt necessary to adopt general-purpose tags/equipment/software. With that goal in mind, the group first embraced the international standards of ISO and IEC, and then developed this general-purpose global guideline, which allows the automotive industry to co-operate with other industries.

Because co-operation with existing mission-critical systems and the database of each enterprise is critical, co-existence with current systems was a consideration during the project. It is consistent with industry standards already widely deployed.

This Global Guideline began as an effort to define the data carrier selection, data structure and storage of data for returnable transport items. It evolved to address the well-identified business need in Japan, the U.S., and Europe for memory capacity beyond a simple 96-bits.

It is hoped that the scope of this guideline will not only realise international traceability and recycling management of returnable transport items, but will also facilitate processes such as customs clearance and promote elimination of returnable transport items tax.

Meetings in Japan, USA and Europe have taken place and we are now in the final stages. We hope to publish these guidelines in April 2009 making it the first global standard for the tracking and tracing of RTIs with RFID tags.

RFID for downstream Vehicle Distribution

We also have a draft version in English for a recommendation on usage of RFID for identification of finished vehicles in the distribution chain, from the manufacturers through the transporters to the dealers. The original input also came from the VDA in the shape of the VDA 5520 recommendation. The solution is based on UHF technology and so called smart labels (combination of a paper label and RFID tag).

The data content has been agreed for quite some time now. What has delayed publishing is mainly some specific ISO related issues that would influence our encoding scheme.

RFID for Item Level or Parts Identification

This is the third application area we have been working on. Also here we have a draft recommendation in English based on a VDA document (VDA 5510). We hope to publish it later this year and are just starting discussions at the global level with our international colleagues about a JAIF version.

How new RFID technology can work in the real world and meet global standards at the same time

Odette Sweden with Volvo Logistics Corporation, Volvo IT and RFID Constructors set out last year, after an RFID standards meeting in Japan, to demonstrate that RFID encoding and decoding schemes can be employed in the automotive supply chain, using new larger memory capacity passive tags, meeting ISO standards and using commercially available equipment.

Previously automotive data formats would not fit into low cost passive ISO 18000-6C UHF tags, due to limited memory space (96 bits). Recently, the situation has changed totally, following the introduction of tags with larger memory space (256 bits or more).

Despite scepticism from certain quarters, Odette Sweden took the initiative to explore the potential usage of these new tags within the automotive industry's supply chain.

The main idea behind the RFID Demonstrator project was to show that automotive data content could fit into the new generation of ISO 18000-6C tags and that printing and reading of such tags available on the market from several technology providers, would work with acceptable performance.

The significant contribution of the Demonstrator to RFID implementation is best summarised as follows:

- It has made ISO RFID standards operational within the automotive and similar environments (or more precisely in the whole industry outside the GS1/EPC community).
- It has verified that guidelines in preparation within the global automotive industry would be possible to implement for parts marking, RTI identification and for vehicle distribution.
- It has filled the gap between ISO standards/automotive recommendations and closed-loop pilot projects.

At the start of the project In April 2008 there were at least two different RFID tag chip manufacturers in Europe offering these new tags; NXP and ST.

The test scenario was a set of data encoding schemes for marking of both RTIs (Returnable Transport Items) as well as of individual parts, using RFID technology based on the following ISO/IEC standards:

- ISO/IEC 18000-6 Describing the RFID tag logical memory layout
- ISO/IEC 15961 and 15962 Describing RFID tag data encoding recommendations
- ISO/IEC 15459 Describing unique identification methods for logistics

The proposal for the Demonstrator project was made on the following premises:

1. It shall be possible to accommodate both Odette and DUNS data numbering schemes, as well as the LA (Japanese) scheme.
2. The most important data elements are to be stored in MB01, for performance reasons.
3. The content of MB01 must be globally unique, i.e. it is, according to the ISO/IEC RFID standards rules, the responsibility of the organisation programming the RFID

- tag for use as an electronic label, to ascertain that the combination of the contents in the data fields in MB01, beginning with the AFI-field, is unique on a global scale.
4. It is an advantage if the same data representation/encoding scheme can be used both for RTIs (Containers) as well as for Individual Items markings.
 5. The memory of the RFID tag shall be used as efficiently as possible. This entails using compaction where possible. Since the data in the tag is not user readable anyway, it is no extra burden to use compaction/de-compaction.
 6. Use of already existing standards in this field shall be maximised.
 7. Test to be made with tags passing through a reader field at different speeds with 100% accuracy.
 8. That the data could be captured and passed through to any legacy system.

The system set up comprised of RFID tags, readers, antennas and suitable software specially developed for the demonstration. After several months of hard work there was a positive conclusion and many valuable things were learnt along the way. In brief:

- Unclear sections in related ISO standards were found that were not always well defined - aspects that must be solved in order to make these standards operational. Examples include entities such as AFI, OID, Relative OID, DSFID, Pre-Cursor, Bit 15 and Bit 17 in the UII and more.
- Unexpected behaviour in the tags was detected, such as writing to the tags would have to be made in more than one step
- Much was learned about the exact interface between tags, readers and ISO standards
- It was possible to demonstrate that the concept of using real automotive industry data in 240 bits passive tags really works.

For more information contact: info@odette.org

Work has started on Version 3 of the Global MMOG/LE

The Global Materials Management Operations Guideline/Logistics Evaluation (MMOG/LE) jointly developed between the Automotive Industry Action Group (AIAG) and Odette International is a standardised continuous improvement and self-assessment tool aimed at providing automotive suppliers with a means to measure and streamline their material planning and logistics processes.

The tool has been in use since 2004 and several thousand users within the Automotive community have been trained in classroom training courses worldwide. Companies encouraging their suppliers to use the MMOG/LE (translated into 10 different languages) include, but are not limited to: Bosch, Chrysler, Ford, Gates, PSA, Renault and Volvo.

The work on Version 3 started last year and its goal is to incorporate suggested improvements and additions from AIAG and Odette member companies in order to emphasise even more the continuous improvement effects the tool can provide to user companies.

There has never been a better time to take a look at this tool if you haven't already done so. The Automotive Industry at the moment needs all the help it can get in improving efficiency and reducing costs.

If you are already familiar with it, why don't you [make suggestions](#) to further improve the tool or join the project team in their work sessions?

For more information please contact Odette International Logistics Programme Manager [Friedel Vogel](#).

Forecast Accuracy Measurement: Definition and Application

The Automotive Industry is characterized by dynamic competition, constantly changing markets and demanding customer requirements. As such, the wide range of products and capital commitment mean that companies need to have a high degree of adaptability, generally resulting in adaptable production systems. The trend in procurement, production and logistics has therefore tended toward developing more flexible supply chains, particularly where companies have to deal with ever more disruptions in their supply chains. Furthermore, the resulting challenges for a company increase dramatically if it is part of several supply chains at the same time.

Customer-supplier relationships in the automotive industry often show relatively pronounced planning deviations in forecasting and release orders, i.e. across all time horizons. Such planning uncertainty and the need for various contingency plans mean high costs and poor performance at different points for OEMs and suppliers. These extra costs – which could be avoided if plans remained on schedule – are known as "turbulence costs".

The main reasons for demand fluctuations include:

- Market developments
- Complexity of the Supply Chain
- Technology, such as changes or quality problems
- Restrictions, such as strikes or legal requirements

The aim of the Forecast Accuracy Measurement recommendation is to define an indicator for forecast reliability which can help to derive an action plan to increase guarantee of supply, and to support cost minimization in supply chains. This means: More stable process chains, more reliable forecasts and release orders, and less rescheduling and fewer additional costs by optimizing forecast accuracy, flexibility and transparency. Evaluating the forecast quality is key to success. Although bilateral customer-supplier contracts include numerous definitions of planning deviation ranges, there is no uniform basis on which to evaluate indicators for forecast quality.

This recommendation therefore proposes the following goals:

- Development of a formula for system-supported evaluation of forecast-quality indicators including stability classification
- Recommendations on the use of these indicators