

Kongsberg Automotive Group – Supplier Logistics Manual  
康斯博格汽车集团——供应商物流手册

# Supplier Logistics Manual

# 供应商物流手册

Kongsberg Automotive

January 2020

2020年1月



Preface 前言

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

The supply chain organization at Kongsberg Automotive contributes to manufacturing excellence in quality, cost and delivery to the customer. In particular, the supply chain function assures the on-time delivery of component material and shipment of finished goods at the lowest cost.

通过供应链部门，康斯博格实现了卓越的制造品质、合理的成本以及及时的产品交付。其中尤为显著的是，供应链部门的职能可有效保证按时交付零件物料以及以最低的成本进行成品装运。

Continued improvement in our global supply chain systems is and will continue to be a competitive advantage for Kongsberg Automotive.

对全球供应链系统的持续改进是康斯博格长期以来的竞争优势所在。

## 1 INTRODUCTION概述

### 1.1 Purpose目的

This logistics manual (“Logistics Manual”) has been created to assist our suppliers in understanding the expectations and logistics requirements when supplying goods to Kongsberg Automotive.

本物流手册（以下简称“物流手册”）旨在帮助供应商理解康斯博格对于供应商供货的期望和要求。

The purpose of this document is to clarify the requirements that Kongsberg Automotive (“KA”) has on the suppliers regarding logistics / supply chain management.

本文件的目的是阐明康斯博格（KA）有关物流/供应链管理的要求。

### 1.2 Scope范围

The document describes the minimum requirements for which the supplier has responsibility. However, system improvements that exceed the requirements specified in this document are always encouraged.

本文件描述了供应商应达到的最低要求。当然，我们非常欢迎供应商做出任何超出本手册要求的系统改进。

The requirements presented in this document and all related documents, are provided as a complement to, and do not replace or alter any Purchase Agreement, the Kongsberg Automotive General Purchasing Conditions (“KA GPC”), Supplier Quality Manual, or requirements included in applicable engineering drawings, specifications or other contractual documents.

本手册以及所有相关文件中的要求作为对任何《采购协议》、《康斯博格通用采购条件（KA GPC）》、《供应商质量手册》或适用工程图纸、规范或其他合同文件中要求的补充，并不对其构成替代或修改。

Specific logistics details to be defined in the Blanket Purchase Order, or a Logistics Agreement between the legal entities of supplier’s delivery location and KA’s receiving location, as applicable.

具体的物流详细信息会在《总括性采购订单》，或供应商交货地点和康斯博格收货地点的法律实体之间达成的《物流协议》中给出规定，若适用。

### 1.3 Application应用

The expectations and requirements described in this manual apply to all suppliers of serial production products supplying to an affiliate or subsidiary of Kongsberg Automotive Holding ASA (such affiliate or subsidiary and Kongsberg Automotive Holding ASA are collectively and individually hereinafter referred to as “Kongsberg Automotive” or “KA”). Suppliers must meet all applicable requirements specified herein. Acceptance of any and/or all purchase orders constitutes acceptance by the supplier to comply with the requirements in this document.

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

本手册中所述期望和要求适用于所有向康斯博格汽车部件公司附属机构或子公司（该等附属机构或子公司以及康斯博格汽车部件公司合称并分别称为“康斯博格”或“KA”）提供批量制造产品的供应商。供应商应满足本文件中所有适用要求。接受任何和/或所有采购订单表示供应商承诺遵守本文件中的条件。

### **1.4 Implementation 实施**

Suppliers are responsible for the development, documentation, implementation and maintenance of their processes to support the requirements in this document. The suppliers are encouraged to implement MMOG/LE as a guideline for their supply management process.

供应商负责对其过程进行开发、文件记录、实施和维护以满足本文件中的要求。我们鼓励供应商实施MMOG/LE（全球物料管理运行指南/物流评估），指导供应管理过程的开展的。

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

### 2 LOGISTICS ORGANISATION 物流部门

Supplier should set up an independent and professional logistics management department and establish a corresponding clear and complete organizational structure. The departments will directly report to senior management of the company.

供应商应设立独立、专业的物流管理部门，并建立清晰、完整的组织结构。相关部门应直接向公司高级管理层汇报。

For each position in the logistics department, there is a detailed job responsibility described and approved by the management personnel with signature.

物流部门的每个职位都应有详细的工作职责描述并经管理层人员签字批准。

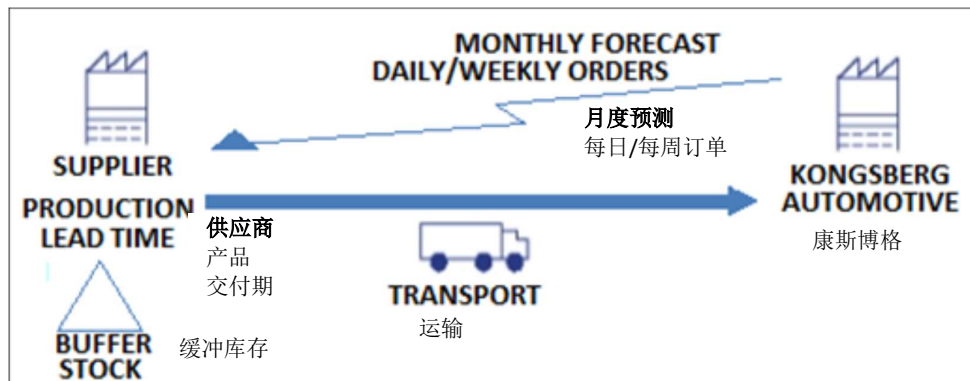
### 3 PROCESS DEFINITION 过程定义

#### 3.1 Delivery Model 交付模型

The delivery model describes the physical flow of material between supplier and Kongsberg Automotive plant. 交付模型描述了供应商和康斯博格工厂之间物料的流转情况。

Details regarding organization of the process between KA and the supplier are defined in the Logistics Agreement.

有关康斯博格和供应商之间过程组织的详细内容，请参阅《物流协议》。



#### 3.2 Communication 沟通

Questions and inquiries regarding delivery dates, current delivery situations and the location of the dispatched goods must be answered by the supplier immediately, or within a time agreed with Kongsberg Automotive material specialist in charge.

供应商必须立即或在与康斯博格负责的物料专员商定的时间内就有关交货日期、当前交货情况和发货地点的问题和询问给出回复。

For the handling of purchase orders and deliveries, the permanent contact persons and their substitutes shall be named in writing. These must be able to make decisions competently and reliably and take the necessary actions within the relationship between the customer and the supplier.

为了处理采购订单和交货事宜，应以书面形式指定永久联系人及其替补人员。该等人员应有能力作出可靠的决定并在处理客户与供应商的关系方面采取必要的行动。

#### 3.3 Contact List 联系清单

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

Supplier must deliver all contact details including names, e-mail addresses and phone numbers for all people involved in supply chain process. Same type of details is presented by Kongsberg Automotive in the same document.

供应商应提供参与供应链过程的所有人员的所有详细联系信息，包括姓名、电子邮箱地址和电话号码。康斯博格会在同一份文件中提供同样类型的详细联系信息。

If needed, contact details of forwarder must be filled in as well.

若需要，还应提供货运代理的详细联系信息。

Contact details to be reviewed and updated as soon as any personnel change appears.

若有任何人员变动，请立即审阅并更新相关联系信息。

### 3.4 Availability可用性

The contact designated by the supplier (or their deputy) must be available on working days during normal local working hours (at least from 8:00 to 16:00 - local time for the supplier in each case) and is communicated to the Kongsberg Automotive contact.

供应商（或其代理）指定的联系人应能够在当地工作日的正常工作时间内（各情况下为供应商的当地时间至少从8:00到16:00）取得联系并且能够与康斯博格联系人进行沟通。

Outside normal local working hours, the supplier must be available using the emergency telephone during the production hours of the Kongsberg Automotive plant supplied. The emergency contact reached using the emergency telephone must be authorized to make decisions on production and shipping (particularly the organization of special transports).

在当地正常工作时间之外，但在供应商供货的康斯博格工厂生产时间内，供应商应确保紧急联系电话畅通。通过紧急联系电话联系到的联系人应有权就生产和装运事宜作出决定（特别是负责特殊运输的部门）。

## 4 ELECTRONIC DATA INTERCHANGE (EDI) 电子数据交换（EDI）

### 4.1 Means of EDI EDI方式

Kongsberg Automotive has a target to achieve 100% Electronic Data Interchange between Kongsberg Automotive and the Supplier to eliminate manual interference in the information flow. It is the intention of the Parties to render their exchange of information more effective by replacing the flow of paper between them with EDI. The manual interference is often causing considerable delays and severe errors that can cause expensive and urgent actions from Kongsberg Automotive and the Supplier.

为消除信息流中的人工介入，康斯博格的目标是在康斯博格与供应商之间实现100%的电子数据交换。以更有效的方式进行信息交换，用EDI取代双方之间的纸质沟通方式是双方共同的意愿。人工介入往往会导致长时间的延误和严重的错误，会令康斯博格和供应商付出昂贵代价或必须采取紧急行动应对。

This guide details the usage of EDI to ensure that Kongsberg Automotive and the Supplier can communicate in a flawless way that is understood and agreed by the Parties. Electronic communication shall be implemented, including sending and receiving capabilities with all suppliers, sub-contractors and logistic providers.

为确保康斯博格和供应商能够以双方理解并达成一致的方式进行无差错沟通，本指南对EDI的使用进行了详细描述。我们应采用电子沟通方式，包括与所有供应商、子承包商和物流提供方之间的收发能力。

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

The supplier shall have the capability to interface with the Kongsberg Automotive receiving plant through one of the following solutions:

供应商应能够通过以下任意一种解决方式与康斯博格收货工厂进行沟通：

- Full EDI (preferred): 完全EDI（推荐）：
  - Based on automotive standards and practice in the applicable region.  
以适用区域汽车标准和惯例为基础。
  - Refer to Kongsberg Automotive EDI specification for more detailed information (EDIFACT DELFOR D97A).  
更多信息请参考《康斯博格EDI规范》（EDIFACT DELFOR D97A）。
- Web-EDI: 网络 - EDI：
  - KA Web-EDI solutions as defined per region.  
基于区域规定的康斯博格网络-EDI解决方案。

Please contact edisupport@ka-group.com for any questions regarding EDI set-up for your company.

有关贵公司EDI设置的任何问题，请联系edisupport@ka-group

### 4.2 Delivery Notification 交货通知

Electronic Delivery Notification (Advanced Shipment Notification (ASN) or Despatch advise message (DESADV)) must be delivered at the moment of truck departure from supplier plant. It is used by Kongsberg Automotive to monitor the materials in transit and to simplify the receiving procedure.

必须在卡车离开供应商工厂时发松电子交货通知（提前装运通知（ASN）或发货通知信息（DESADV）。康斯博格可据此监控运输中的物料并简化收货程序。

Timely and accurate submission of electronic Delivery Notification is required for improvement of supply chain effectiveness.

为提升供应链的有效性，请务必做到及时并准确地提交电子交货通知。

Electronic Delivery Notification submission is an important input for the evaluation of supplier delivery performance.

提交电子交货通知是评估供应商交付表现的重要考量项目。

### 4.3 Data Protection 数据保护

The respective national laws and regulations for data protection must be complied with. Contractors must be obligated by the management of the supplier company to comply with the legal requirements concerning data protection.

应遵守有关数据保护的国家和法规。供应商公司管理层应责成其承包商遵守有关数据保护的法律法规。

## 5 DELIVERY SCHEDULES 交付时间表

### 5.1 Applicable Calendar 适用日程表

Supplier is expected to support collections based on Kongsberg's Automotive working calendar (working days, holidays, factory shut-downs), defined by KA in an appendix to the Logistics Agreement. If the supplier plant is on holiday, the supplier must take special action to ensure that all documents are printed and parts are prepared on time for collection or delivered on date mentioned in schedules (depending on Incoterms). Supplier should

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

make their own preparations in advance to support their closure and coverage of demands for Kongsberg Automotive. All supplier closures should be reported to Kongsberg Automotive within a reasonable timeframe. 供应商应按照康斯博格在《物流协议》附件中规定的工作日程表（工作日、节假日、工厂停工）为提货提供支持。若提货当日供应商为节假日，供应商应采取特别措施以确保所有文件已经按时打印并且零件按时准备就绪，可在日程表规定的日期进行提货或交付（按照Incoterms要求）。供应商应提前做好关闭休假前的准备工作，切实响应康斯博格的需求。所有供应商关闭休假前应在合理的时间框架内向康斯博格汇报。

### 5.2 Delivery Time and Quantity 交货时间和数量

Kongsberg Automotive requires all suppliers to provide 100% on-time delivery performance with the correct quantity, documentation, packaging and labelling. Monitoring of performance levels in this area will be ongoing with formal reporting on a monthly basis (see section 10).

康斯博格要求所有供应商做到100%准时交货，并确保交货数量、文件、包装和标签的正确性。这方面的表现情况会通过月度正式报告持续进行监控（参见第10部分）。

To further clarify this, we consider unauthorized early or late deliveries and partial or over shipments to be unacceptable. The quantity shipped per order or release cannot vary from specified quantity without the consent of the material specialist who is responsible at the receiving plant.

此外，任何未经授权的提早或延迟交货以及分批装运或溢装将被拒收。若无接收工厂负责的物料专员同意，每单装运数量或放行数量不得与规定数量不一致。

### 5.3 Acceptance of Delivery Schedules 交货时间表的接受

Supplier is obliged to review received schedules from Kongsberg Automotive and alert Kongsberg Automotive material specialist in charge within 24h in case of facing any constraint in fulfilling the demand. Otherwise, the supplier is considered as able to meet Kongsberg Automotive needs.

供应商应查看从康斯博格收到的时间表。当遇到任何限制性的情况导致无法满足时间表中的要求时，供应商应在24小时内提醒康斯博格负责的物料专员。否则，则视为供应商有能力满足康斯博格要求。

## 6 CAPACITY MANAGEMENT 产能管理

### 6.1 Manufacturing Capability 制造能力

Suppliers are expected to have the resources necessary (people, property, facilities, equipment, and materials) to supply the products required to meet Kongsberg Automotive's production schedule. Supplier is obliged to inform KA material specialist, logistics manager, operational buyer by mail within 24h from identification of the constraint.

为提供满足康斯博格生产计划所需的产品，供应商应配备必要的资源（人员、财产、设施、设备和物料）。供应商若遇到任何限制性情况应在24小时内通过邮件通知康斯博格物料专员、物流经理和运营买方。

### 6.2 Capacity 产能

Suppliers to Kongsberg Automotive shall be able to provide a weekly capacity as defined in Project documentation. Generally, this capacity shall be met by maximum 2 shifts per day and 5 days per week.

康斯博格的供应商应能够提供项目文件中规定的每周产能。通常每天最多两个班次、每周工作五天视为满足产能要求。

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

Please note that any capacity figures, provided by Kongsberg Automotive to Supplier, are for planning purpose only and do not represent a binding commitment.

请注意，康斯博格对供应商规定的任何产能数据仅为计划目的，并不代表具有约束力的承诺。

### 6.3 Flexibility灵活性

If not otherwise agreed in writing, in order for Kongsberg Automotive to be able to meet our customers' fluctuating demands, it is required that the suppliers have the flexibility to meet week over week schedule changes of  $\pm 15\%$ . This will normally be balanced over time.

若无另外书面规定，为使康斯博格能够满足客户的波动需求，我们要求供应商能够灵活满足每周计划 $\pm 15\%$ 的需求波动。通常我们会在一段时间能保持需求量的平衡。

The above requirement is valid during the stable production phase. During ramp-up and phase out of parts the flexibility must be increased so it is adapted to the lower level of production.

上述要求在稳定生产阶段有效。在零件增产以及淘汰期间，必须提高灵活性以适应最低生产水平要求。

The flexibility requirement can generally be met by keeping a safety stock, see 6.4.

一般可以通过维持安全库存满足灵活性要求，参见6.4。

### 6.4 Safety Stock安全库存

If required by KA due to supplier performance, the supplier agrees to keep safety stock in order to meet Kongsberg Automotive's requirements regarding Flexibility. Details on the safety stock will be defined in the Logistics Agreement with the local plant based on provided forecasts.

如果KA因供应商表现而提出要求，供应商同意维持安全库存以满足康斯博格对灵活性的要求。有关安全库存的详细信息请参见与本地工厂基于预测值达成的《物流协议》中的规定。

### 6.5 Consignment Stock寄存物料

In certain cases, depending on transport time, type of product etc. it might be recommended that the supplier sets up a Consignment Stock at, or close to, Kongsberg Automotive plant. Details for this will then be agreed in a separate Consignment Stock Agreement.

在某些情况下，基于运输时间、产品类别等因素，可能会建议供应商在康斯博格工厂或附近设置寄存物料。有关寄存物料的详细内容会在单独的《寄存物料协议》中作出约定。

### 6.6 Lead-times交货周期

Kongsberg Automotive requires the shortest possible lead-times in order to support their customer base. In alignment with point 13.2 Material Authorisation, lead-times from supplier to Kongsberg Automotive should reflect Supplier Planning and production timings. Where supplier has ownership of shipping, transit time should also be accounted for. Supplier should not include lead-times from their own supplier, and this should be managed by using the supplier forecast from Kongsberg Automotive. Where Kongsberg Automotive are responsible for shipping, transit time will be automatically reflected within the schedules.

康斯博格要求能在最短、可行的生产周期内为客户提供支持。根据13.2《物料授权》中规定，供应商告知康斯博格的交货周期应能够体现供应商的计划和生产时间安排。若供应商负责装运，还应将运送时间考虑在内。供应商计算交货周期时不应包含自身供应商的交货周期，为此应根据康斯博格的供应商预测对自身供应商交货周期实施有效管理。若由康斯博格负责装运，则在时间表中会自动体现运送时间。

## 7 PACKAGING包装

### 7.1 Packaging Proposal包装建议



# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

Proposal of packaging for each part number is presented by supplier and approved by Kongsberg Automotive after packaging trial. The proposed packaging is defined for each part number separately in the Packaging Proposal Form (an appendix to the Logistics Agreement), which is to be signed by supplier and approved by Kongsberg Automotive.

供应商应提供每个零件的包装建议并在包装试验后获得康斯博格批准。应在包装建议表（《物流协议》附件）中为每个零件编号单独定义包装建议，并经供应商签字和康斯博格批准。

### 7.2 Packaging Guideline 包装准则

Proposed packaging shall be in accordance to Kongsberg Automotive Standard Packaging List, which provides an overview of possible container dimensions and types. For standardization reasons, deviations from this catalogue are only possible in justified exceptional cases and must not cause additional costs for Kongsberg Automotive.

建议的包装方式应符合《康斯博格标准包装清单》要求，清单中对集装箱可能的尺寸和类型进行了描述。为了实现标准化，仅在在有正当理由的例外情况下可以与上述清单中要求产生偏差并且不得因此而令康斯博格支付额外费用。

#### General Requirements: 一般要求:

- There must be only one part number per container  
每个集装箱只能有一个零件编号
- All parts must be shipped in a standard off-the-shelf packaging if appropriate  
若适用，所有零件应采用标准成品包装进行装运
- Packaging must be able to withstand international shipments overseas  
包装应能够满足海外国际运输要求
- Total palletized weight must not to exceed 1000 kg (or in line with the legal requirements in the country of use)  
总托盘重量不得超过1000kg（或符合使用国家的法律要求）
- Unit load sizes should be sized to optimize the density in a sea container and must not exceed 107 cm  
调整单位装载尺寸以优化海运集装箱的密度并且不得超过107cm

#### Box Requirements: 包装盒要求:

- Boxes must have all readable barcode labels facing out  
包装盒上所有可读取的条形码必须朝外
- Boxes must be affixed to the pallet by stretch-wrap or banding  
包装盒应通过拉紧包装或绑带固定在托盘上
- A box cannot extend beyond the edges of the pallet; the corners of the carton must be supported by the deck board of the pallet  
包装盒不得超出托盘边缘；托盘的货架板应能承托住包装纸箱的角
- Carton boxes must be of appropriate corrugated board strength to ensure pack integrity based on the size and weight of the container and the shipping method  
包装纸箱应由具有足够强度的瓦楞纸构成，基于集装箱的尺寸和重量以及装运方式应能确保包装的完整性
- All containers must be able to withstand, at minimum, the weight of a pallet of like parts double stacked upon it inside a sea container  
所有集装箱应至少能够承受海运集装箱内装载类似零件的托盘两层叠放
- If additional stacking strength is needed, corner posts are to be used  
若要求额外的堆放强度，则应使用脚柱
- Corner posts must be affixed to the corrugated carton  
脚柱必须附在瓦楞纸上

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

### Pallet Requirements: 托盘要求:

- Pallets must have four-way forklift entry  
托盘应确保叉车能从四个方向进入
- Pallets must be of durable construction; no pine pallets are allowed  
托盘结构应耐久；不得使用松木托盘
- Pallets must be sized correctly to optimize the density per sea container and in order to fit the carton(s)  
确保托盘尺寸正确以优化每个海运集装箱的密度并能够容纳包装纸箱
- Returnable pallets are to be used where economically feasible  
若经济可行，可采用可循环托盘
- Pallets should be in accordance with global standards, as seen within Kongsberg Automotive Standard  
托盘应符合全球标准，参见《康斯博格汽车标准》

### Packaging List:

包装清单:

Type: EU & ASIA	Packaging description	Height (mm)	Length (mm)	Width (mm)
Pallet	EUR 1	x	1200	800
Pallet	EUR 2	x	1000	1200
Pallet	EUR 3	x	1200	1000
Pallet	EUR 6	x	600	800
Pallet	ASIA	x	1100	1100

类型：欧洲&亚洲	包装描述	高度[MM]	长度[MM]	宽度[MM]
托盘	欧洲 1	x	1200	800
托盘	欧洲 2	x	1000	1200
托盘	欧洲 3	x	1200	1000
托盘	欧洲 6	x	600	800
托盘	亚洲	x	1100	1100

### Other Requirements: 其他要求:

- Components with “sensitive” surface must be packed with protective material  
带有“敏感表面”的零件应采用保护材料包装
- ESD (Electrostatic Discharge) protection and VCI (Vapor Corrosion Inhibitor) must be used when appropriate  
若合适，应使用ESD（静电放电）保护和VCI（气相缓蚀剂）
- Moisture Resistant Adhesive (MRA) is recommended for all corrugated shipping overseas  
建议所有采用瓦楞纸的海外运输使用防潮粘合剂
- All wooden material packaging (especially pallets) shall be according to IPPC (International Plant Protection Convention) standards  
所有木质材料包装（特别是托盘）应符合IPPC（国际植物保护公约）标准

### 7.3 Returnable Packaging 可回收包装

If returnable packaging is requested from Kongsberg Automotive or our customers this will be defined in RFQ and in Logistics Agreement (or purchase order). The cleanliness of the returnable packaging remains with the owner.

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

若康斯博格或者我们的客户要求使用可回收包装，则会在RFQ以及《物流协议》（或采购订单）中规定。包装所有人应负责确保可回收包装的清洁度。

### 7.4 Change of Packaging 包装变更

In case of necessity to redefine or change packaging, Packaging Proposal Form must be filled in once more and sent to Kongsberg Automotive for approval.

若需要对包装做出重新规定或变更，必须再次填写《包装建议表》并发送给康斯博格获得批准。

## 8 LABELS AND DOCUMENTS 标签和文件

### 8.1 Label Requirements 标签要求

The adherence to labelling requirements will be continuously monitored. Non-compliance may result in an administrative claim. Labels must be according to automotive standard (see [www.aiag.org](http://www.aiag.org) or [www.odette.org](http://www.odette.org)). 我们会持续监控对标签要求的遵守度。若不符合规定，将导致行政索赔。标签应符合汽车标准（参见 [www.aiag.org](http://www.aiag.org) 或 [www.odette.org](http://www.odette.org)）。

### 8.2 Prototype and Pre-series Labels 原型和小批生产标签

For any delivery of prototypes, validation samples or pre-series parts, as well as in case of engineering change, new batches must be marked with special labels and accompanied with the correct PPAP, which are placed in a highly visible area and have a different colour.

对于原型、验证样品或小批量零件的交货，以及工程变更而言，应对新批次标上特殊标签并附上正确的PPAP，特殊标签应放在醒目的位置并采用不同的颜色。

### 8.3 Documents 文件

All shipments must be accompanied by appropriate documentation. Documentation may include, but not limited to, packing slip, bill of lading, NAFTA certificates, Certification of Origin or other needed documentation depending on area, commercial invoices and hazardous materials information. Where needed, documents should be sent directly to the local Logistics representative via email. A Delivery Notification must be attached to one of the skids/pallets in each shipment.

每次装运时应附上相应的文件。文件应包括但不限于装箱单、提货单、NAFTA证明、原产地证明或根据其他区域、商业发票和危险物料信息要求的文件。若需要，应通过电子邮件将文件直接发送给当地物流代表。每批装运的滑动木箱/托盘应附上一份交货通知。

### 8.4 Certificate of Origin (COO) 原产地证明书 (COO)

Kongsberg Automotive requests that suppliers submits relative COO to buying plants each year, in the month of October, to allow for existing records to be modified and/or updated.

康斯博格要求供应商在每年十月提交购买设备所需的相关COO，以对当前记录进行修改和/或更新。

## 9 TRANSPORT 运输

### 9.1 Delayed Notification 延迟通知

Delayed notification of the forwarding company by the supplier can cause postponements, which can in turn lead to shortages. Proof of any late notification is provided by the forwarding company. Any costs for expedited shipments shall be paid by supplier.

供应商延迟通知货运代理可能会导致延期，进而导致供应短缺。货运代理公司提供延迟通知的证明。任何加急货运所产生的费用将由供应商承担。

### 9.2 Disruptions 中断

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

All disruptions must be notified to the material specialist in Kongsberg Automotive and the forwarding company immediately, giving the reason for and type of disruption.

若出现任何中断情况，必须立即通知康斯博格的物料专员以及货运代理公司，告知发生中断的原因和类型。

### 9.3 Emergency Shipments 紧急装运

Expedited shipments at Kongsberg Automotive expense must be always agreed with the material specialist in charge in writing.

任何康斯博格自付费用的加急装运应与负责的物料专员达成书面约定。

### 9.4 Scheduled Delivery 预定交货

Suppliers are required to give prior notice and gain agreement of any delivery that is being made to Kongsberg Automotive via the local Logistics department and representative.

任何通过本地物流部门和代表向康斯博格进行的交货应给出事先通知并获得同意。

### 9.5 Cargo Inspection 货物检查

Where applicable, Supplier is to maintain the responsibility for shipments and their chosen carriers. Kongsberg Automotive reserve the right to reject any delivery that is deemed unsafe to unload and/or damaged in accordance with point 11 Logistics Claim.

若适用，供应商应对装运事宜和其选择的运输公司负责。康斯博格有权根据第11部分物流索赔的规定拒绝任何其认为卸货不安全和/或出现损害的交货。

## 10 DELIVERY PERFORMANCE 交货表现

### 10.1 Scoring System 评分系统

Kongsberg Automotive relies on industry standard OTIF (On time, In Full) to score supplier performance.

康斯博格以交货标准OTIF（准时保量）为基础对供应商表现进行打分。

The OTIF definition consists of two parts - on time and in full. It refers to the KPI measuring the efficiency and accuracy of delivery or logistics in the supply chain.

OTIF由两部分构成——准时和保量，即供应链过程中测量效率和交货或物流准确性的KPI。

#### Delivered On Time: 按时交货:

- Organizations define a time which they should be able to reach  
相关部门定义可以送达的时间
  - This KPI can refer to the requested delivery date, production cycle, or agreed response time  
该KPI指要求的交货时间、生产周期或约定的响应时间。
- One typical on time criteria is that the delivery should not be late. However, what is equally important is that it should not be too early, either. If a case closes much faster than average, it typically means some exceptions have occurred.  
时间标准最重要的是交货不能延迟。但是同样重要的是交货也不能太早。若某一事项完成比平均水平快很多，则通常容易发生例外情况。

#### Delivered In Full: 保量交货:

- The most common way to define in full is that the customer gets exactly the amount they have ordered.  
定义保量交货最常规的方法就是让客户收到与订单中所述数量完全一致的产品。

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

### 10.2 Calculation 计算

Kongsberg Automotive is monitoring supplier delivery performance with reporting on a monthly basis.  
康斯博格每月通过报告监控供应商交货表现。

Delivery performance is calculated in the following way:

交货表现计算方式如下：

		QUANTITY 数量	
		OK 合格	NOK 不合格
DATE 日期	OK 合格	100%	0%
	NOK 不合格	0%	0%

#### OTIF formulas:

#### OTIF公式:

On Time In Full = (Cases matching the criteria) / (Total number of cases)

准时保量= (满足标准的交货次数) / (总交货次数)

On Time = (Delivery time) - (Confirmed delivery time)

准时= (交货时间) - (确认的交货时间)

- In this case, supplier should be able to match a delivery time agreed with Kongsberg Automotive.  
这种情况下，供应商应能够与康斯博格约定的交货时间一致
- Target: = 0  
目标: =0

In Full = (Delivered amount) - (Confirmed amount)

保量= (交货数量) - (确认数量)

- Target: = 0, if the delivered amount should be exactly what is agreed with Kongsberg Automotive.  
目标: =0, 交货数量必须为与康斯博格约定的数量。

If a production line is shut down due to poor quality, late delivery, or incorrect quantity on any shipment, the supplier will be responsible for compensation as defined in KA GPCs.

若任何一条生产线因任何一批装运质量差、延迟交货或数量不正确而关闭，供应商应负责KA CPCs中规定的赔偿。

## 11 LOGISTICS CLAIM 物流索赔

### 11.1 Logistics Non-compliance 物流不合规

Any deviation related to Kongsberg Automotive requirements on time, quantity, documentation, packaging or labelling is considered a Logistics non-conformance.

与康斯博格时间、数量、文件、包装或标签要求发生任何偏差将被视为物流不合规。

The following types of claims can be registered:

可能提出以下类别的投诉：

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

### Quantity: 数量:

- Actual delivered quantity deviates from requested quantity in current schedule  
实际交货数量与当前安排表中的要求的数量不一致。

### Date: 日期:

- Actual delivery date deviates from requested delivery date in current schedule  
实际交货日期与当前安排表中的要求日期不一致。

### Part number: 零件编号:

- Wrong part number or mixed parts delivered  
错误的零件编号或零件混杂交货

### Document: 文件:

- Discrepancy in quantity between physical delivery and delivery documents or  
实际交货的数量与交货文件中的数量不一致或者
- Missing documents or  
缺少文件或者
- Wrong information of documents  
文件信息错误

### Label: 标签:

- Missing label or  
缺少标签或者
- Label with wrong information  
标签上信息错误

### Delivery Notification/ASN: 交货通知/ASN (预先装运清单):

- Missing Delivery Notification/ASN or  
没有交货通知/ASN或者
- Wrong information sent in Delivery Notification/ASN  
交货通知/ASN给出错误信息

### Packaging: 包装:

- Packaging not according to approved Packaging Instruction or  
未按照批准的包装说明进行包装或者
- Damaged packaging and/or pallet  
包装和/或托盘损坏

### Communication: 沟通:

- Lack of effective communication with supplier  
与供应商缺乏有效沟通

For all such cases, supplier will be notified with an administrative claim. Number of claims will be measured and included in Supplier performance reporting.

所有上述情况下，供应商将会受到行政索赔。索赔次数会在供应商表现报告中进行计算和描述。

### 11.2 Delay Claims 延迟索赔

If suppliers fail to deliver parts as per the given time and quantity, which makes Kongsberg Automotive suffer from production stoppage, retrofit, production adjustment and order placed with a third party, the supplier shall compensate Kongsberg Automotive according to the KA GPC. The standard claim values are set by each KA plant. 若供应商未按照给定的时间和数量交货零件，导致康斯博格面临生产停止、改型、生产调整以及向第三方下订单，则供应商应根据KA GPC向康斯博格提供赔偿。每个KA工厂会自行设定索赔标准值。

## 12 SUPPLIER ESCALATION PROCESS 供应商升级管理程序

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

### 12.1 Purpose of Supplier Escalation Process 供应商升级管理程序的目的

The supplier escalation process is a formalized method of working, when handling supplier related problems in Kongsberg Automotive production and projects. The intention is to monitor supplier performance data, to prioritize and to focus on poor performers and to use a structured approach to problem solving, with the target to improve supplier performance.

供应商升级管理程序是处理供应商发生的与康斯博格生产和项目相关问题正式工作方法。目的是监控供应商表现数据、决定相关事项的优先顺序并重点关注表现不佳的供应商，通过结构化的方法来解决，提升供应商表现。

### 12.2 Escalation Criteria, Levels and Consequences 升级管理标准、等级和影响

This is an overview over the Logistics Supplier Escalation levels and consequences:

以下为物流供应商升级管理等级和影响：

Esc. level 升级管理等级	Criteria 标准	Status 状态	Impact 影响
2	<ul style="list-style-type: none"> <li>Action plan from normal non-conformance handling not followed and/or not sufficient in order to solve problem or 未完成常规不合格处理行动计划和/或执行不充分没有解决问题或者</li> <li>Repeated level 1 issues or 重复发生等级1中的问题</li> <li>Delivery issue disturbing KA production 交货问题干扰KA的生产</li> </ul>	Conditionally Approved (CA) 有条件批准 (CA)	New business can be awarded under certain conditions 在某些条件下可以获得新业务
3	<ul style="list-style-type: none"> <li>Action plan from level 2 not followed or not sufficient in order to solve problem or 未完成等级2中的行动计划和/或执行不充分没有解决问题或者</li> <li>Repeated disturbances to KA production or 反复干扰KA的生产或者</li> <li>Delivery issue disturbing KA's customer's production 交货问题干扰了KA客户的生产</li> </ul>	New Business on Hold (NBH) 新业务暂停 (NBH)	New business cannot be awarded 新获得的业务升级到该等级

### 12.3 Expectations on the Supplier 对供应商的期望

The supplier is expected to ensure that there are resources dedicated to working on the issue causing the escalation. The supplier must confirm the reception of the letter, provide, recovery plan, root cause analysis and action plan, and participate in follow-up meetings as requested by Kongsberg Automotive.

我们期望供应商能投入努力来解决导致升级管理的问题。供应商应确认收到给出恢复计划、根本原因和行动计划的信函，并且应康斯博格要求参与后续会议。

There shall be targets set for the supplier to achieve, in order to close the escalation. When these targets are met the supplier will be de-escalated.

为结束升级管理程序，供应商应设定所需达成的目标。当供应商达成这些目标后，将实施供应商管理降级。

## 13 EMERGENCY SITUATIONS 紧急情况

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

### 13.1 Contingency Plan 应急计划

A contingency plan must be defined in order to secure continued supply of goods to Kongsberg Automotive, should the supplier enter into an emergency situation. The contingency plan shall be an appendix to the Logistics Agreement.

供应商应制定应急计划，在遇到紧急情况时确保对康斯博格的持续供货。该应急计划应作为《物流协议》的附件。

### 13.2 External Support 外部支持

In extreme cases, Kongsberg Automotive reserve the right to provide on-site resources to support supplier in relation to procurement of materials, production planning, production execution and shipping of products, in relation to Kongsberg Automotive fulfilling customer demands.

个别情况下，康斯博格有权对供应商就物料采购、生产计划、生产执行和货物装运提供相关现场资源支持以满足康斯博格客户要求。

## 14 END OF PRODUCTION (EOP) 生产结束 (EOP)

At the EOP of a product, Kongsberg Automotive expects the supplier to contribute to minimizing the risk for obsolescence. This means that the supplier must plan to consume safety stock before EOP. The previously agreed min. order quantity (MOQ) can then be revised by Kongsberg Automotive based on actual demand.

康斯博格期望供应商在一个产品生产结束 (EOP) 后努力降低该产品淘汰的风险。也就是说供应商应在EOP之前消耗安全库存。康斯博格可根据实际需求对之前约定的最小订单量 (MOQ) 进行修改。

Kongsberg Automotive commits to communicating product end dates as soon as they are known. 康斯博格承诺一旦其获知产品结束日期会立即告知。

### 14.1 Claims 索赔

The supplier commits to informing Kongsberg Automotive about its claim related to the end of production of a part, based on their inventory (components and finished products), and the applicable Material Authorization times.

供应商承诺根据其库存 (零件和成品)，以及适用的物料授权次数告知康斯博格与零件生产结束相关的索赔信息。

Any acceptance from Kongsberg Automotive regarding costs for obsolete material does not free the supplier from providing spare parts according to the agreement or gives the supplier the right to scrap any tool owned by KA or KA's customer, unless explicitly approved by KA in writing.

除非康斯博格明确书面批准，否则康斯博格对作废旧料成本的接受不得免除供应商提供符合协议要求的零部件的义务或者赋予供应商报废任何KA或KA客户工具的权利。

### 14.2 Material Authorization 物料授权

Unless otherwise agreed in writing, the Kongsberg Automotive general authorization times are applicable:

除非另有书面约定，否则康斯博格通用授权次数应适用：

Authorization 授权	Liability period 责任期限	Delivery Schedule Release Code 交货时间表 放行代码
Fabrication authorization (FAB) 制造授权 (FAB)	2 weeks (day 1-15) 2周 (1-15天)	1



# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

Raw material authorization (RAW) 原材料授权 (RAW)	6 weeks (day 16-45) 6周 (16-45天)	2
Forecast only 仅预测	Day 46- 46天及以上	Blank 空白

The authorization means that, should the demands drop, Kongsberg Automotive accepts liability for the material produced or purchased within the defined FAB and RAW authorization times. This does not mean that the periods are fixed.

授权表示，若需求量下降，康斯博格将接受FAB和RAW授权次数内的物料生产或购买责任。但是这并不表示期限固定。

In the event that obsolescence occurs due to discontinuation of a part, the highest RAW and FAB authorizations must be identified through reviewing the schedule release history. Kongsberg Automotive does not accept liability for any raw material or produced parts outside the RAW and FAB authorizations.

若因零件废止导致零件淘汰，应通过查阅计划的放行历史来识别RAW和FAB的最高授权次数。康斯博格不接受任何RAW和FAB授权以外的与任何物料或生产零件相关的责任。

## 15 SUB-CONTRACTING 子承包

All subcontractors are obligated to comply completely with the Logistics Manual. Scrap quantities and physical inventory owned by Kongsberg Automotive should be reported at least once per month, in order to correctly track the inventory being under Kongsberg Automotive ownership. The report shall contain information on number of scrapped parts with explanation of reasons. Scrap should not be grouped across a period of more than one week.

所有子承包商必须完全遵守本《物流手册》。为确保对康斯博格所有的库存进行正确追踪，应就康斯博格所有的报废数量和物理库存进行至少每月一次的汇报。报告中应包括报废零件的数量信息以及原因解释。必须在一周内对报废零件进行分类。

## 16 MMOG/LE SELF ASSESSMENT

### MMOG/LE（全球物料管理运行指南/物流评估）自我评估

Materials Planning and Logistics (MP&L) is the process of managing the procurement, movement, and storage of materials, parts, and finished goods (and the related information flows) throughout the organization through the timely and cost-effective fulfilment of orders.

物料计划和物流（MP&L）是通过及时且符合成本效益的方式完成订单以对整个组织的物料、零件和成品（以及相关信息流）的采购、移动和储存进行管理的过程。

The Materials Management Operations Guideline/Logistics Evaluation (MMOG/LE) is an assessment tool jointly created by the Automotive Industry Action Group (AIAG), Odette representatives, OEM representatives, and automotive suppliers, in order to assist organizations in developing and implementing world class MP&L processes. It defines recommended business practices for the supply chain management processes of automotive industry suppliers and is intended to establish a common definition of materials practices to facilitate effective communication between supply chain partners.

全球物料管理运行指南/物流评估（MMOG/LE）是由汽车工业行动集团（AIAG），Odette（欧洲电信传输数据交换组织）代表、OEM（原始设备制造商）代表以及汽车供应商联合创建的评估工具，目的是帮

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

助各相关部门开发并实施世界水平的MP&L。该工具中为汽车行业供应商提供了供应链管理过程商业惯例的相关建议，旨在通过建立物料惯例通用定义促进供应链合伙人之间进行有效沟通。

The purpose of the MMOG/LE, as well as the reasoning behind the deployment of this by KA, is to produce one common material planning and logistics evaluation that can be used by the supplier and customer throughout the product life cycle, including the early development phases.

MMOG/LE的目的以及KA采用MMOG/LE的原因是为了建立一个共同的物料计划和物流评估体系，由供应商和客户在整个产品生命周期，包括早期开发阶段使用。

MMOG/LE self-assessment is part of logistics evaluation. Suppliers to Kongsberg Automotive are encouraged to use MMOG/LE as a self-assessment tool, and it is recommended to follow a training course in MMOG/LE with a certified training society, before self-assessment.

MMOG/LE自我评估是物流评估的一部分。我们鼓励康斯博格的供应商使用MMOG/LE作为自我评估的工具，并建议在自我评估之前接受由经认证的培训协会开展的课程培训。

Kongsberg Automotive reserves the right to field an inspection mission to examine the supplier's MMOG/LE implementation and to take part in logistics reviews to monitor the supplier's logistics action plans.

康斯博格有权进行实地考察，检查供应商MMOG/LE的实施情况并参与物流评审，监控供应商的物流行动计划实施情况。

MMOG/LE documentation is available on Odette and AIAG web site.

您可从Odette和AIAG网站上获得MMOG/LE文件。

## 17 RELATED DOCUMENTS相关文件

All related documents, as well as our requirement documents (Kongsberg Automotive General Purchasing Conditions and Kongsberg Automotive Supplier Quality Manual) are available through Kongsberg Automotive Internet site:

所有相关文件，以及我们的要求文件（《康斯博格通用采购条件》和《康斯博格供应商质量手册》）可从康斯博格网站上获取：

[www.kongsbergautomotive.com/for\\_suppliers/](http://www.kongsbergautomotive.com/for_suppliers/)

The related documents are:

相关文件包括：

Kongsberg Automotive Standard Packaging List

康斯博格标准包装清单

EDIFACT DELFOR D97A

FO-IT-006-KA EDI Parameter Form

FO-IT-006-KA EDI参数表

FO-LG-003-KA Contact List

FO-LG-003-KA 合同清单

FO-LG-004-KA Packaging Proposal Form

FO-LG-004-KA 包装建议表

FO-LG-005-KA Premium Freight Approval Request

FO-LG-005-KA 超额运费批准请求

# Kongsberg Automotive Group – Supplier Logistics Manual

## 康斯博格汽车集团——供应商物流手册

FO-LG-006-KA Scrap Inventory Report

FO-LG-006-KA 报废库存汇报

FO-LG-007-KA Emergency Situation - Contingency Plan

FO-LG-007-KA 紧急情况 – 应急计划

### 18. LANGUAGE

This Logistics Manual is written in Chinese and English. The Chinese version (if any) is for reference only. In case of any discrepancy between these two versions, the English version shall prevail.

本物流手册以中英文书就，中文版本（如有）仅供参考。若中文与英文有任何不一致的，以英文约定为准。