

Customer Information		
R20_7_2_Information about the return of devices regarding dangerous goods		
Directive created or modified: on: 03/01/2017 by: Frank Jünemann (UMB)	Directive checked and released: on: 06/01/2017 by: Dr. Bunse (GGB-BfU), Andreas Bühling (GGB-QUNDIS)	Change index: 0 Page 1 of 7

1 Returns to QUNDIS

1.1 Returns to QUNDIS for complaint purposes

The QUNDIS return delivery note must be used:

<http://qundis.com/service/downloads-and-information/transport-recycling-guidelines/>

Please note that we may not accept any returns that were not transported in accordance with the applicable requirements.

PLEASE NOTE! Not all transport companies are qualified to transport dangerous goods. Ask the transport company and have this confirmed in the form of a relevant certificate.

The transport boxes or packaging for lithium batteries and all QUNDIS devices that use these batteries are always subject to a marking requirement. We expressly recommend the further use of the packaging used by QUNDIS GmbH for transport, since this fulfils all the necessary marking requirements. Care must be taken that nothing is glued over these labels. The special requirements concerning the protective function of the packaging are also satisfied by the packaging used by QUNDIS (furthermore, if the product becomes damaged as a result of the use of different packaging, warranty and guarantee claims can be rendered invalid).

If the original packaging is no longer available, you can refer to **Annex I** for the markings.

1.2 Returns of old devices to QUNDIS with installed lithium batteries

PLEASE NOTE: Please observe the QUNDIS recycling instructions and use the QUNDIS return delivery note:

<http://qundis.com/service/downloads-and-information/transport-recycling-guidelines/>

The transport boxes or packaging for lithium batteries and all QUNDIS devices that use these batteries are always subject to a marking requirement. We expressly recommend the further use of the packaging used by QUNDIS GmbH for transport, since this fulfils all the necessary marking requirements. Care must be taken that nothing is glued over these labels. The special requirements concerning the protective function of the packaging are also satisfied by the packaging used by QUNDIS.

Old devices according to Table 1 (lithium content less than 2 g) may be sent as bulk goods provided that the cells and batteries contained in them are safeguarded in an equivalent manner by the device. The outer packaging must have a sturdy design.

Old devices according to Table 2 (lithium content greater than 2 g) must be individually packed - preferably in the QUNDIS original packaging.

The marking and documentation requirements in accordance with ADR (road, rail) and IATA (air transport) must also be complied with for old devices.

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Information about the transport of QUNDIS devices with lithium batteries

Lithium batteries are subject to the requirements of the dangerous goods directive GGVSEB and the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) as well as the International Air Transport Association Dangerous Goods Regulations (IATA- DGR), as the batteries are potentially hazardous. They are therefore subject to the national transport regulations depending on the mode of transport. The non-observance of the regulations for the transport of dangerous goods may result in significant fine proceedings.

The following sets of rules apply:

ADR English - European Agreement concerning the International Carriage of Dangerous Goods by Road

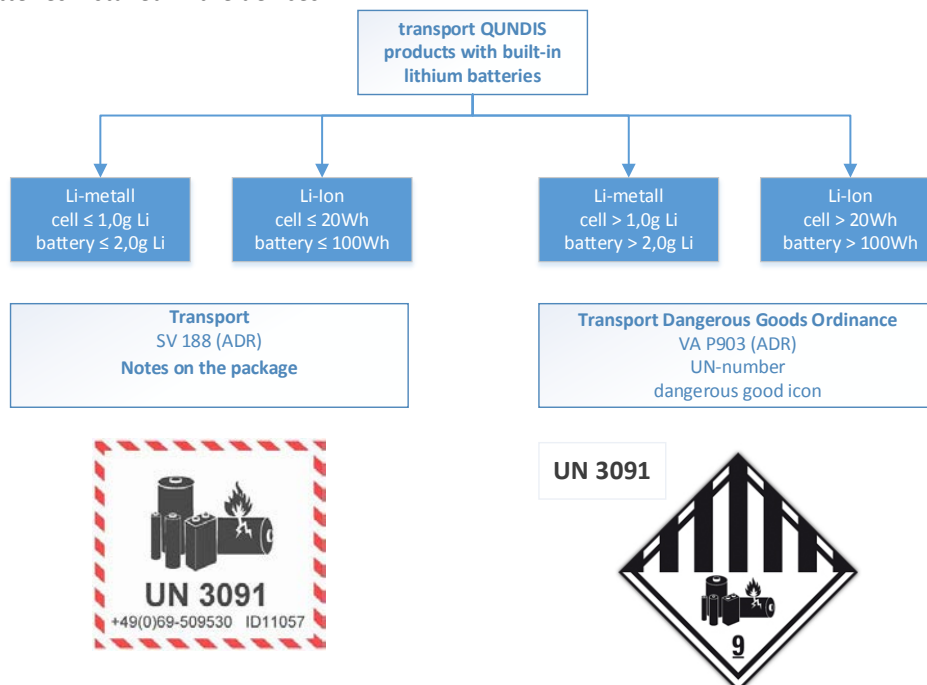
ADR German - Europäisches Übereinkommen über internationale Beförderung gefährlicher Güter auf der Straße

GGVSEB – Gefahrgutverordnung Straße, Eisenbahn, Binnenschifffahrt (Directive on the Transport of Dangerous Goods by Road, Rail and Inland Waterways)

IATA - International Air Transport Association Dangerous Goods Regulations (DGR)

IMDG Code – International Maritime Dangerous Goods Code

Different marking and documentation requirements result for the shipper depending on the lithium content of the cells/batteries installed in the devices.



Observe load securing requirements!

According to Sec. 29 (1) GGVSEB, the **shipper** and the **vehicle driver** among others must observe the regulations concerning the **securing of loads** according to Section 7.5.7 ADR. This includes the inspection of the load securing. **Fines** may be imposed in case of non-observance! Document the load securing and archive the enclosed form - see Annex III.

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2 Transport regulation for devices with Li batteries (lithium content cell < 1 g, battery < 2 g)

QUNDIS product	Name	Lithium per cell [g]
WFx3x.*	Qwater (Volu3)	0.3
WFZ.BW*	Battery replacement packet Megatron2	0.6
WFZ.PS*	Triggering tool for radio telegrams	0.3
WFZ16.DM*	Add-on radio module Deltamess	0.3
WFZ16.WG*	Add-on radio module for water devices	0.3
WFZ16.AL*	Add-on radio module Allmess	0.4
WFZ16.EL*	Add-on radio module Elster	0.4
RWM5*	Add-on radio module Modularis	0.4
WTX16.232*	Network node, radio 868MHz network network connection	0.6
WTX16.MOD-1	Gateway GSM and GPRS external antenna network connection	0.6
AEW3*	Impulse adapter	0.6
HCA5*	Qcaloric heat cost allocator	0.3
HMC5*/HMR5*	Qheat heat meter	0.6
MHM5*	M-bus module for Q heat 5 QUN	0.4
WME5*	QWATER5.5	0.6
WMM5*	Mech. water meter with installed add-on radio module	0.4
SDT5003xxx	Qsmoke5.5 AMR-WB-S/C Qundis	2 x 0.65
SDT5ZZ3xxx	Smoke detector standalone - Hekatron Genius H-N	0.65
SDT5ZZ20xxx	Smoke detector standalone - Pyrex PX-I (V3)	0.6
FBCRAA/KS	Battery -Lithium- CRAA with cable and plug	0.6
FBR0018	Battery_Saft_AA_Qnode5-LS14500_QUN	1
RML5Q206xxx	Q log 5.5 (lithium-ion cell)	4.9 Wh

2.1 Road and rail: Transport of devices with batteries (lithium content cell < 1 g, battery < 2 g)

Marking



Restrictions

Note!
The transport company must be informed that lithium metal batteries are to be transported. This must be noted on the consignment note.


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3 Transport regulation for devices with Li batteries (lithium content cell > 1 g, battery > 2 g)

Some QUNDIS devices are equipped with lithium metal batteries whose lithium content is greater than 2 g. There is no exemption for these devices.

QUNDIS product	Name	Lithium per cell [g]
RNN5xxx	Q node 5	4.5
WTT16xxx	Network node radio 868MHz battery	4.4
R20xxx, R21xxx, R28xxx	Calculator unit for split heat meter	3.5
rcu4xxx	Data collector	10
RNG5xxx	QGateway5	2 x 10

3.1 Road and rail: Transport of devices with batteries (lithium content cell > 1 g, battery > 2 g)

Marking	Restrictions
	<p>Transport only in original QUNDIS packaging</p> <p>Note! The transport company must be informed that lithium metal batteries are to be transported. This must be noted on the consignment note.</p> <p>Transport document for the transport of packages by air transport in accordance with the applicable IATA-DGR (Annex II)</p> <p>Observe load securing requirements!</p>

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Annex I - Markings for dangerous goods

	<p>Danger label/danger marking - Class 9 (in reduced size) black on white</p> <p>Minimum dimensions: 100 x 100 mm</p> <p>For cells with greater than 1 gram of lithium.</p>
	<p>Lithium Battery mark (in reduced size) black on white, red border with diagonal lines</p> <p>Minimum dimensions: 120 x 110mm, width of hatching: 5mm</p> <p>For cells with less than 1 gram of lithium.</p> <p>If the size of the package requires, the dimensions and line width [approx. 3 mm] to at least 105 mm wide and 74 mm high.</p>
<p>UN3091</p>	<p>Marking for UN3091 Lithium metal batteries in equipment letter height: minimum 12 mm</p>
<p>UN3090</p>	<p>Marking for UN3091 Lithium metal batteries letter height: minimum 12 mm</p>
<p>OVERPACK</p>	<p>If an outer packaging is used and not all of the representative markings and danger labels for the dangerous goods contained within it are visible, the outer packaging with the printout OVERPACK (letter height: minimum 12 mm) must be applied to the package.</p>

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4 Annex II - Transport document according to applicable ADR requirement

Sender (acc. to dangerous goods laws)	Recipient

Documents carried

Delivery note Customs documents IMO declaration Written instruction

Information about dangerous goods

Packages

Package Code/ package number	UN number, official description (with necessary supplements)	Danger label	Packaging group	Tunnel code	Category	Number	Description	Total quantity (kg or l [litres])*
999994711	UN3091 Lithium metal batteries in equipment	9	II	(E)	2	3	Cardboard box	6.5

blue = example

Place/date:	Visual inspection of the vehicle and equipment, documents and tie-downs checked	Goods and accompanying documents taken over; name, company and department (in print, stamp)
Signature of sender/creator; name, company and department (in print, stamp)	Signature of the loader sender/creator; name, company and department (in print, stamp)	Forwarding agent, transport company sender/creator; name, company and department (in print, stamp)

Specification of dangerous goods points (1'000 point calculator - ADR 1.1.3.6)

Transport according to para. 1.1.4.2.1
Transport in a supply chain that includes a carriage by sea or air)

The following exceptions are used:

Transport without exceeding the exemption levels defined in 1.1.3.6

Total quantity transport category 1		Of these x 20 for (UN 1005 and UN 1017)	
		Of these x 50 for remaining substances:	
Total quantity transport category 2	6.5	x 3	20**
Total quantity transport category 3		x 1	
Total quantity transport category 4		Remains unconsidered for summation	
		Sum according to 1.1.3.6.4 (less equal to 1000)	20

* For objects with gross mass in kg (for dangerous goods in devices and equipment that are unspecified in the dangerous goods list, the total quantity of the dangerous goods contained in kg or litres);

** the calculated value must be rounded up 19.5 => 20

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5 Annex III - Load securing for dangerous goods transport in accordance with 7.5.1. ADR

Date:		Carrier:	
Vehicle registration:		Name of the driver:	
Dangerous goods delivered/to be shipped		Delivery note number/ associated waste dispatch note/transfer note	
		yes/ OK	no/ not OK
Check of documents Comparison of information in delivery note / waste dispatch or waste transfer note with load, check of information acc. to ADR Remarks: _____		<input type="checkbox"/>	<input type="checkbox"/>
ADR certificate available?		<input type="checkbox"/>	<input type="checkbox"/>
Alcohol ban complied with?		<input type="checkbox"/>	<input type="checkbox"/>
Required equipment available? - Chock - Warning sign - Fire extinguisher - First-aid material - Personal protective equipment (e.g. protective goggles, gloves wherever prescribed) - Emergency materials (hand lamp, collection tray, etc.)		<input type="checkbox"/>	<input type="checkbox"/>
Visual inspection of vehicle for obvious defects - Tyre damage - General vehicle condition Remarks: _____		<input type="checkbox"/>	<input type="checkbox"/>
Visual inspection of equipment used for loading or unloading (e.g. hoses, couplings, lift trucks, etc.) for obvious defects (e.g. cracks, etc.) Remarks: _____		<input type="checkbox"/>	<input type="checkbox"/>
When picking up or partially unloading dangerous goods upon delivery: Load securing - Auxiliary material for load securing available? - Load securing according to requirements? ▪ Non-positive locking ▪ Positive locking - Lashing points suitable? - Stacking of packages allowed? - Loading / unloading / securing of packages possible without damage? Remarks: _____		<input type="checkbox"/>	<input type="checkbox"/>
If the check determines that one of the points listed above is not OK, the superior to take further actions must be informed immediately. Until the defect(s) is/are remedied, the vehicle may not exit the premises.			
Place: _____		Signature of checker: _____	