

## **Agreement on data exchange and flood forecasting within the Meuse IRBD**

### **Context and objective of this agreement**

Flow forecasting and early warning of impending floods are valuable means of limiting the damage caused by floods. Goods and persons potentially at risk can, as far as possible, be brought to safety in good time.

Real-time monitoring of hydrological data (water levels and/or flows) is needed in the Meuse and its tributaries to ensure such forecasts and warnings.

To calculate flow forecasts, hydrological measurement data must be combined with weather observations and forecasts.

The States and Regions of the Meuse International River Basin District (IRBD) located in the downstream parts of the rivers are primarily concerned by the availability of real-time measurements of hydrological conditions, as the future evolution of flows in these States depends on the flows observed further upstream.

The development of forecasts and warnings is under national and/or regional responsibility. The national/regional services ensure that the local data needs of the services concerned (crisis coordinators, meteorological services, hydrometeorological services, etc.) are met.

In this context, the IMC States and Regions, in the framework of the implementation of the first Flood Risk Management Plan for the Meuse IRBD under the FRD<sup>1</sup>, have established this multilateral agreement for the exchange of hydrological data and forecasts (heights, flows) based on the following conditions and principles:

- maintaining the current organisation for flood warning and forecasting;
- this agreement does not imply any obligation to change the technical requirements (e.g. equipment including water level gauges and rain gauge stations, teleinformatics, transmission channels, forecast calculation);
- no charge for exchanges and no additional costs;
- reciprocity of exchanges;
- no dissemination of raw information to third parties unless agreed by the Contracting Parties concerned;
- no use for commercial purposes by the recipient.

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<sup>1</sup> EU Directive 2007/60/EC on the assessment and management of flood risks (Flood Risk Directive FRD)



## ***Article 1 - Services involved in the data exchange***

The Contracting Parties signatories to this agreement, hereinafter referred to as the Contracting Parties, agree on the basis of the measures provided for in the international part of the Flood Risk Management Plan for the Meuse IRBD, to comply with the points set out below concerning the operational exchange of flood forecasting data.

The exchange of data takes place between the services listed in Annex 1.

## ***Article 2 - Data to be exchanged***

The Contracting Parties signatories to this agreement agree to the mutual and continuous exchange of hydrological data and forecasts (water levels, flows) between the services listed in Annex 1. They commit themselves to reciprocity of exchange.

The details of the data exchange can be found in Annexes 2 and 3.

## ***Article 3 - Conditions of data availability***

Data are made available in computerised format.

No costs shall be charged for the exchange of data.

The Contracting Parties shall ensure that data are provided with their best available technical means.

Each Contracting Party shall be responsible for the frequency of supply and the exchange format of its data.

## ***Article 4 - Data property right***

The data supplying services keep all property rights to the data provided.

The raw data exchanged may not be used by the recipients for commercial purposes, nor may it be made available to third parties without the prior written consent of the service that provided the data concerned.

Any use of the data must be accompanied by an acknowledgement of the source of the supplying service.

## ***Article 5 - Terms of use of the data***

The data exchanged are raw data not yet validated. The accuracy, completeness and availability of the data exchanged are not guaranteed by the Contracting Parties. The Contracting Parties do not assume any responsibility towards the other Contracting Parties for the use and interpretation of the data provided.

The Contracting Parties are entitled to store the exchanged data in their central databases.

Each service shall produce and disseminate flood information and forecasts exclusively within its area of competence, except where Contracting Parties agree on a common approach.

## ***Article 6 - Entry into force and withdrawal of the Agreement***

This Agreement shall enter into force after signature by all the Contracting Parties.



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Each of the Contracting Parties may denounce the agreement, in writing to the other Parties, by giving three months' notice before the end of the current year.

Termination of cooperation by one Contracting Party shall have no effect on the continued cooperation of the other Contracting Parties. In the event of termination by a single service, only the corresponding data of that Contracting Party shall no longer be exchanged.

### ***Article 7 - Execution and modification of the agreement***

The IMC's Hydrology - Floods Working Group (WG HF) shall coordinate the execution and implementation of the agreement.

The WG HF evaluates the implementation of the agreement annually and ensures that its annexes are updated if necessary. It is responsible for analysing problems encountered in the implementation of the agreement and for formulating proposals for amendments. It shall report to the Plenary Assembly of the IMC.

This Convention, drawn up in a single copy in the Dutch, French and German languages, is deposited in the archives of the IMC secretariat, which will provide each of the Contracting Parties with a copy.

Any amendment to this Convention shall be made in writing after unanimous decision of the Contracting Parties.

Done in Brussels, this 9<sup>th</sup> day of December 2016



***Appendix 1: List of services involved in data exchange***

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**Germany**

**Landesamt für Natur, Umwelt und Verbraucherschutz NRW**

Leibnizstr. 10  
DE-45659 Recklinghausen

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**Flemish Region**

**MOW-Waterbouwkundig Laboratorium (metingen bevaarbare waterlopen)**

Berchemlei 115  
BE-2140 Antwerpen

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**Walloon Region**

**Service public de Wallonie**

**DG02 -Direction générale opérationnelle Mobilité et Voies hydrauliques**

**Direction de la Gestion hydrologique intégrée**

Boulevard du Nord 8  
BE-5000 Namur

**DG03 -Direction générale opérationnelle Agriculture, Ressources naturelles et Environnement**

**Direction des Cours d'Eau non navigables**

Avenue Prince de Liege 7  
BE-5100 Jambes

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**France**

**DREAL Grand-Est**

Rue Augustin Fresnel 2  
CS 95038  
FR-57071 METZ Cedex 3

**DREAL Hauts-de-France**

Service Risque  
Rue de Tournai 44  
CS 40259  
FR-59019 Lille cedex

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**Luxembourg**

**Administration de la gestion de l'eau**

Service Hydrometrie  
Route d'Ettelbruck 10  
LU-9230 Diekirch

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## The Netherlands

**Rijkswaterstaat, Verkeer en Watermanagement, WMCN**

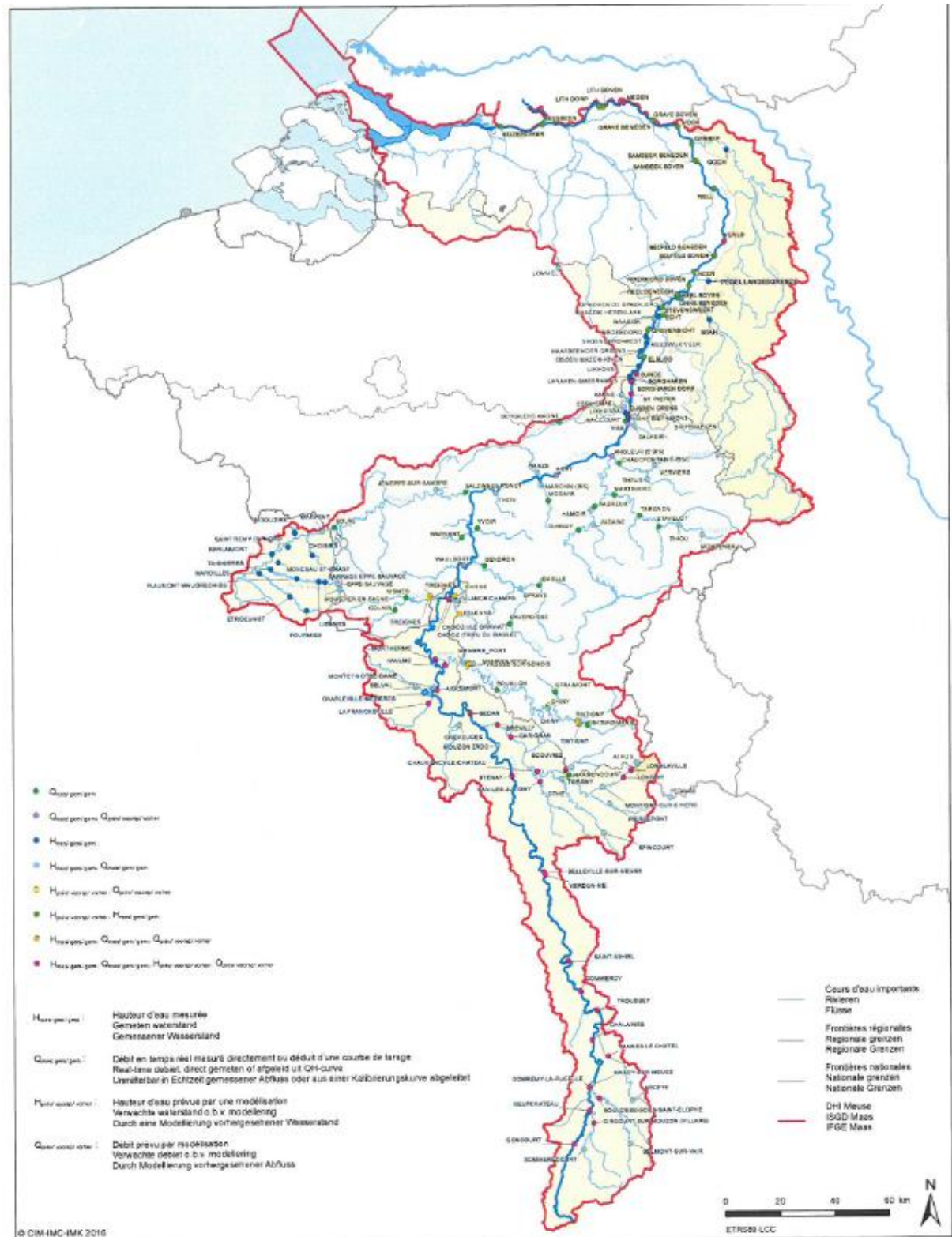
Bezoekadres: Zuiderwagenplein 2

8224 AD Lelystad

Postadres: Postbus 2232

NL-3500 GE Utrecht

Appendix 2: agreement on data exchange and flood forecasting within the Meuse IRBD: Stations



This appendix is an integral part of the agreement on data exchange and flood forecasting within the Meuse IRBD

**Appendix 3: Data provided**
**1. France**

River	Station	Type of data <sup>(1)</sup>	X and Y coordinates (Projection system = Lambert 93)	
MEUSE	AIGLEMONT	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	826298	6965321
AROFFE	AROFFE	H <sub>meas</sub> , Q <sub>meas</sub>	914553	6815149
MEUSE	BELLEVILLE-SUR-MEUSE	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	873480	6899557
VAIR	BELMONT-SUR-VAIR	H <sub>meas</sub> , Q <sub>meas</sub>	915349	6798800
SORMONNE	BELVAL	H <sub>meas</sub> , Q <sub>meas</sub>	818031	6965781
CHIERS	BREVILLY	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	850526	6954165
CHIERS	CARIGNAN	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	856036	6949932
MEUSE	CHALAINES	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	897467	6836865
MEUSE	CHARLEVILLE-MEZIERES	H <sub>meas</sub> , Q <sub>meas</sub>	823709	6963644
CHIERS	CHAUVENCY-LE-CHATEAU	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	867524	6937651
BAR	CHEVEUGES	H <sub>meas</sub> , Q <sub>meas</sub>	836014	6952872
MEUSE	CHOOZ (Ile Graviat)	H <sub>meas</sub> , Q <sub>meas</sub>	829406	7000815
MEUSE	CHOOZ (Trou du Diable)	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	827692	7000410
MOUZON	CIRCOURT sur MOUZON (Villars)	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	900866	6805348
MEUSE	COMMERCY	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	891278	6855174
MEUSE	DOMREMY-LA-PUCELLE	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	897882	6818876
TON	ECOUVIEZ	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	878175	6939045
MEUSE	GONCOURT	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	894048	6796618
LOISON	HAN-LES-JUVIGNY	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	868881	6933729
SEMOY	HAULME	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	828526	6975248
VENCE	LA FRANCHEVILLE	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	823656	6960096
HOUILLE	LANDRICHAMPS	H <sub>meas</sub> , Q <sub>meas</sub>	830850	6999961
CHIERS	LONGLAVILLE	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	902970	6941121
CHIERS	LONGWY	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	900406	6938131
MEUSE	MAXEY-SUR-MEUSE	H <sub>meas</sub> , Q <sub>meas</sub>	899131	6820300
MEUSE	MONTCY-NOTRE-DAME	H <sub>meas</sub> , Q <sub>meas</sub>	824903	6966182
MEUSE	MONTHERME	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	824474	6977094
CHIERS	MONTIGNY-SUR-CHIERS	H <sub>meas</sub> , Q <sub>meas</sub>	892623	6933894
MEUSE	MOUZON ZRDC	H <sub>meas</sub> , Q <sub>meas</sub>	851426	6946245
MEUSE	NEUFCHATEAU	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	898729	6809854
OTHAIN	OTHE	H <sub>meas</sub> , Q <sub>meas</sub>	876842	6935488
CRUSNES	PIERREPONT	H <sub>meas</sub> , Q <sub>meas</sub>	896006	6927785
MEUSE	SAINT-MIHIEL	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	885599	6866412
MEUSE	SEDAN	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	839741	6957521
MOUZON	SOMMERE COURT	H <sub>meas</sub> , Q <sub>meas</sub>	897802	6794896



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VAIR	SOULOSSE-SOUS-SAINT-ELOPHE	$H_{meas}, Q_{meas}, H_{pred}, Q_{pred}$	902248	6814882
OTHAIN	SPINCOURT	$H_{meas}, Q_{meas}$	894864	6916350
MEUSE	STENAY	$H_{meas}, Q_{meas}, H_{pred}, Q_{pred}$	857894	6934953
MEUSE	TROUSSEY	$H_{meas}, Q_{meas}, H_{pred}, Q_{pred}$	898418	6848491
AROFFE	VANNES LE CHATEL	$H_{meas}, Q_{meas}, H_{pred}, Q_{pred}$	904072	6831250
MEUSE	VERDUN-Me	$H_{meas}, Q_{meas}, H_{pred}, Q_{pred}$	874070	6898442
CHIERS	TORGNY	$H_{pred}, Q_{pred}$	878637	6937168
SEMOY	MEMBRE_PONT	$H_{pred}, Q_{pred}$	836859	6975522
SEMOY	TINTIGNY	$H_{pred}, Q_{pred}$	881836	6957130
VIROIN	TREIGNES	$H_{pred}, Q_{pred}$	820052	7000214
SEMOY	CHINY	$H_{pred}, Q_{pred}$	869503	6963203
HELPE MINEURE	FOURMIES	$H_{meas}$	773533	6991466
HELPE MINEURE	ETROEUNGT	$H_{meas}$	766582	6996219
HELPE MINEURE	MAROILLES	$H_{meas}$	754212	7003963
HELPE MAJEURE	BARRAGE EPPE SAUVAGE	$H_{meas}$	779592	7002924
HELPE MAJEURE	LIESSIES	$H_{meas}$	777215	7002872
HELPE MAJEURE	FLAUMONT WAUDRECHIES	$H_{meas}$	768683	7003258
HELPE MAJEURE	TAISNIERES	$H_{meas}$	758428	7005916
TARSY	MONCEAU ST-WAAST	$H_{meas}$	761061	7008763
SAMBRE	BERLAIMONT	$H_{meas}$	758423	7011792
CLIGNEUX	SAINT REMY DU NORD	$H_{meas}$	764318	7015027
SAMBRE	HAUTMONT	$H_{meas}$	765575	7017478
RUISSEAU DES GUIDES	DOUZIES	$H_{meas}$	766272	7020683
FLAMENNE	DOUZIES	$H_{meas}$	766318	7020689
SAMBRE	MAUBEUGE AMONT	$H_{meas}$	7694328	7020305
SAMBRE	MAUBEUGE AVAL	$H_{meas}$	7696298	7020135
SOLRE	CHOISIES	$H_{meas}$	773885	7012768
SOLRE	FERRIERE	$H_{meas}$	771136	70188784
SAMBRE	MARPENT	$H_{meas} / Q_{meas}$	776830	7022364

(1)  $H_{meas}$  = measured water level

$Q_{meas}$  = real time flow measured directly or deduced from a rating curve

$H_{pred}$  = water level predicted by a model

$Q_{pred}$  = predicted flow by modelling

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## 2. Luxembourg

River	Station	Type of data <sup>(1)</sup>	X and Y coordinates (Projection system = Lambert 93)	
CHIERS	PÉTANGE	H <sub>meas</sub> , Q <sub>meas</sub> (on the basis of a rating curve, in progress)	69181	57371

(1) H<sub>meas</sub> = measured water level

Q<sub>meas</sub> = real time flow measured directly or deduced from a rating curve

H<sub>pred</sub> = water level predicted by a model

Q<sub>pred</sub> = predicted flow by modelling



3. Wallonia

OBSERVATIONS

River	Station	Type of data <sup>(1)</sup>	X and Y coordinates (Projection system = Lambert 93)	
SEMOIS	CHINY	H <sub>meas</sub> , Q <sub>meas</sub>	220742	48650
MEUSE	CHOOZ	H <sub>meas</sub> , Q <sub>meas</sub>	181326	86860
HOUILLE	FELENNE	H <sub>meas</sub> , Q <sub>meas</sub>	184069	81398
SEMOIS	MEMBRE Pont	H <sub>meas</sub> , Q <sub>meas</sub>	188341	61505
SEMOIS	TINTIGNY	H <sub>meas</sub> , Q <sub>meas</sub>	232940	42360
VIROIN	TREIGNES	H <sub>meas</sub> , Q <sub>meas</sub>	171986	86423
SEMOIS	ARLON	R	255007	42169
CHIERS	ATHUS	R	256507	28397
CHIERS	AUBANGE	R	253845	28871
SEMOIS	BERTRIX	R	213595	60012
SEMOIS	BOUILLON	R, Q <sub>meas</sub>	200495	53078
VIROIN	BOUSSU-EN-FAGNE	R	157131	86527
VIROIN	CUL-DES-SARTS	R	157680	70939
SEMOIS	FRATIN	R	236753	40225
HAUTE MEUSE	GEDINNE	R	193760	74312
SEMOIS	MEIX-LE-TIGE	R	247659	35292
SAMBRE	MOMIGNIES	R	135767	80410
SEMOIS	NAMOISSART	R	232010	59004
CHIERS	ORVAL	R	219807	35765
VIROIN	PETIGNY Barrage	R	161961	79173
CHIERS	SELANGE	R	256224	33983
VIERRE	STRAIMONT	R	222952	54286
SEMOIS	SUGNY	R	188248	55039
CHIERS	TORGNY	R	230422	22381
SEMOIS	VRESSE	R	190278	62500
EAU NOIRE	COUVIN	Q <sub>meas</sub>	159381	81078
EAU BLANCHE	NISMES	Q <sub>meas</sub>	163437	86052
SEMOIS	SAINTE-MARIE	Q <sub>meas</sub>	236226	42165
VIERRE	STRAIMONT	Q <sub>meas</sub>	222913	53997
CHIERS	TORGNY	Q <sub>meas</sub>	229481	22474
CANAL ALBERT	MAREXHE	H	238647	150149
VEDRE	BALMORAL	R	258126	134269
VEDRE	BATTICE	R	253200	149235
LESSE	DAVERDISSE	R, Q <sub>meas</sub>	203632	78744
SAMBRE	LIGNY	R	163707	133164
OURTHE	MARCHE	R	219630	104736
OURTHE	ORTHO	R	238496	92057
AMBLEVE	ROBERTVILLE	R	273556	128170
SAMBRE	SOLRE S/S Bar-Ecluse	R	134411	110966
GEER	WAREMME	R	213047	155319
MEUSE	AMAY	Q <sub>meas</sub>	217275	136622
OURTHE	ANGLEUR (2 BIS)	Q <sub>meas</sub>	237993	145265
GEER	BERGILERS Amont	Q <sub>meas</sub>	216964	156990
VEDRE	CHAUDFONTAINE Pisc	Q <sub>meas</sub>	240980	142873
LESSE	GENDRON	Q <sub>meas</sub>	192403	100195



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CANAL ALBERT	HACCOURT	$Q_{meas}$	242270	159116
AMBLEVE	MARTINRIVE	$Q_{meas}$	240021	130556
SAMBRE	SALZINNES Ronet	$Q_{meas}$	182958	127783
OURTHE	TABREUX	$Q_{meas}$	232853	125886
MEUSE	WISE	$Q_{meas}$	243306	158093
MEUSE	WAULSORT	$Q_{meas}$	184325	99750
MEUSE MITOYENNE	LIXHE Aval	$H_{meas}$	242573	161861
MEUSE	LIXHE Bief Amont	$H_{meas}$	243197	160314
HAUTE MEUSE	ANSEREMME	R	188570	103350
GEER	AWANS	R	227000	152205
LESSE	BEAURAING	R	191657	88864
AMBLEVE	BUTGENBACH	R	280721	126523
HAUTE MEUSE	CINEY	R	203058	109199
AMBLEVE	COO INF.	R	257075	120991
HAUTE MEUSE	CRUPET	R	192267	116179
OURTHE	EREZEE	R	236667	109356
HAUTE MEUSE	FLORENNES	R	170280	102654
GUEULE	GEMMENICH	R	263361	161066
SAMBRE	GERPINNES	R	161521	112953
VEDDRE	JALHAY	R	266002	138638
MEUSE	LANAYE	R	243049	165669
MEUSE	LANDENNE	R	198624	134392
LESSE	LIBIN	R	213702	74481
AMBLEVE	LOUVEIGNE	R	244558	134832
HOYOUX	MODAVE	$R, Q_{meas}$	215114	126736
SAMBRE	MONCEAU Bar-Ecluse	R	150791	120228
SAMBRE	MORNIMONT Bar-Ecluse	R	174057	125915
LESSE	NASSOGNE	R	219988	91995
OURTHE	OUFFET	R	227130	125891
EAU D'HEURE	PLATE TAILLE	R	151055	97862
OURTHE	RACHAMPS-NOVILLE	R	251592	86756
LESSE	ROCHEFORT	R	210413	95226
HAUTE MEUSE	SAINT-GERARD	R	175065	115074
OURTHE	SAINT-HUBERT Aéro	R	224149	81375
OURTHE	SART-TILMAN	R	235004	142432
EAU D'HEURE	SENZEILLES	R	157040	96780
SAMBRE	SIVRY	R	140030	96326
OURTHE	SOMME-LEUZE	R	221362	114500
OURTHE	TAILLES	R	249071	102189
VEDDRE	TERNELL	R	276725	141812
HAUTE MEUSE	VEDRIN	R	184882	132188
AMBLEVE	VIELSALM	R	260695	108978
OURTHE	DURBUY	$Q_{meas}$	227337	116315
LHOMME	JEMELLE	$Q_{meas}$	213816	94208



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SAMBRE	SOLRE	$Q_{meas}$	133790	110935
AMBLEVE	STAVELLOT	$Q_{meas}$	257829	119662
AMBLEVE	TARGNON	$Q_{meas}$	250013	123454
MOLIGNEE	WARNANT	$Q_{meas}$	182807	110488
BOCQ	YVOIR	$Q_{meas}$	188678	114326
RULLES	TINTIGNY	$H_{meas}, Q_{meas}$	233319	43098
AISNE	JUZAINÉ	$H_{meas}, Q_{meas}$	232993	118698
TON	HARNONCOURT	$H_{meas}, Q_{meas}$	231435	25671
WARCHE	THIOU	$H_{meas}, Q_{meas}$	265410	120828
NÉBLON	HAMOIR	$H_{meas}, Q_{meas}$	231494	124110
MEHAIGNE	WANZE	$H_{meas}, Q_{meas}$	210171	137156
HOEGNE	THEUX	$H_{meas}, Q_{meas}$	252201	137368
MESSANCY	ATHUS	$H_{meas}, Q_{meas}$	255779	29255
GEER	EBEN-EMAEL	$H_{meas}, Q_{meas}$	241312	164275
LHOMME	EPRAVE	$H_{meas}, Q_{meas}$	206845	92363
BERWINNE	DALHEM	$H_{meas}, Q_{meas}$	245623	157426
GUEULE	SIPPENAEKEN	$H_{meas}, Q_{meas}$	260928	161171
RY DU MOULIN	VRESSE-SUR-SEMOIS	$H_{meas}, Q_{meas}$	190945	62564
VESDRE	VERVIERS	$H_{meas}, Q_{meas}$	254550	143074
ORNEAU	JEMEPPE-SUR-SAMBRE	$H_{meas}, Q_{meas}$	171794	127970
AMBLÈVE	MONTENEAU	$H_{meas}, Q_{meas}$	274687	117920
SAMSON	THON	$H_{meas}, Q_{meas}$	194731	128043
HOYOUX	MARCHIN (BIS)	$H_{meas}, Q_{meas}$	211804	132530
MONTBLIART	EPPE-SAUVAGE	$H_{meas}, Q_{meas}$	136387	89659
HELPE MAJEURE	MOUSTIER-EN-FAGNE	$H_{meas}, Q_{meas}$	137500	87405

## PREVISIONS

River	Station	Type of data <sup>(1)</sup>	X and Y coordinates (Projection system = Lambert 93)	
MEUSE	CHOOZ	$Q_{pred}$	181326	86860
HOUILLE	FELENNE	$Q_{pred}$	184069	81398
SEMOIS	MEMBRE Pont	$Q_{pred}$	188341	61505
SEMOIS	TINTIGNY	$Q_{pred}$	232940	42360
VIROIN	TREIGNES	$Q_{pred}$	171986	86423
MEUSE	AMAY	$Q_{pred}$	217275	136622
OURTHE	ANGLEUR (2 BIS)	$Q_{pred}$	237993	145265
MEUSE	WISE	$Q_{pred}$	243306	158093
MEUSE	WAULSORT	$Q_{pred}$	184325	99750

(1)  $H_{meas}$  = measured water level

$Q_{meas}$  = real time flow measured directly or deduced from a rating curve

$H_{pred}$  = water level predicted by a model

$Q_{pred}$  = predicted flow by modelling

R = Rain

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4. Flanders

River	Station	Type of data <sup>(1)</sup>	X and Y coordinates (Projection system = Lambert 93)	
			X	Y
Maas	Maaseik (maa02a-1066)	H <sub>meas</sub> , Q <sub>meas</sub>	250359	199280
Maas	Negenoord (maa04a-1066)	H <sub>meas</sub>	247572	192011
Maas	Meeswijk Veer (maa05a-1066)	H <sub>meas</sub>	248061	189389
Maas	Eisden-Mazenhoven (maa06a-1066)	H <sub>meas</sub>	246013	186149
Maas	Uikhoven (maa07a-1066)	H <sub>meas</sub>	245543	180338
Maas	Lanaken-Smeermaas (maa08a-1066)	H <sub>meas</sub>	242473	176283
Albertkanaal	Kanne (abk11a-1066)	H <sub>meas</sub> , Q <sub>meas</sub>	240088	169124
Kanaal Bocholt-Herentals	Lommel (kbh03a-1066)	H <sub>meas</sub> , Q <sub>meas</sub>	212405	215759
Maasplassen	Maasbeemder Greend (maa13a-1066)	H <sub>meas</sub>	245956	186235
Maasplassen	Negenoord-West (maa12a-1066)	H <sub>meas</sub>	247536	191965
Maasplassen	Maaseik Herenlaak (maa11a-1066)	H <sub>meas</sub>	251557	200001
Maasplassen	Ophoven De Spaenjerd (maa10a-1066)	H <sub>meas</sub>	251838	203188

(1) H<sub>meas</sub> = measured water level

Q<sub>meas</sub> = real time flow measured directly or deduced from a rating curve

5. Netherlands

River	Station	Type of data <sup>(1)</sup>	X and Y coordinates (Projection system = Lambert 93)	
MAAS	EIJSDEN GRENS	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	17587000	30761000
MAAS	ST. PIETER	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	17685000	31565000
JULIANAKANAAL	BORGHAREN	H <sub>pred</sub> , H <sub>meas</sub>	17715000	32069000
MAAS	BORGHAREN DORP	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	17638000	32040000
MAAS	BUNDE	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	17837000	32332000
MAAS	ELSLOO	H <sub>pred</sub> , H <sub>meas</sub>	18090000	32987000
MAAS	GREVENBICHT	H <sub>pred</sub> , H <sub>meas</sub>	18194200	34015900
MAAS	ECHT	H <sub>pred</sub> , H <sub>meas</sub>	18735000	34640000
MAAS	STEVENSWEERT	H <sub>pred</sub> , H <sub>meas</sub>	18681200	34916600
MAAS	LINNE BENEDEN	H <sub>pred</sub> , H <sub>meas</sub>	19262000	35327000
MAAS	HEEL BOVEN	H <sub>pred</sub> , H <sub>meas</sub>	19211000	35402000
MAAS	HEEL BENEDEN	H <sub>pred</sub> , H <sub>meas</sub>	19224000	35425000
MAAS	ROERMOND BOVEN	H <sub>pred</sub> , H <sub>meas</sub>	19654000	35812000
MAAS	NEER	H <sub>pred</sub> , H <sub>meas</sub>	19808000	36356000
MAAS	BELFELD BOVEN	H <sub>pred</sub> , H <sub>meas</sub>	20562000	37018000
MAAS	BELFELD BENEDEN	H <sub>pred</sub> , H <sub>meas</sub>	20572000	37040000
MAAS	VENLO	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	20902000	37580000
MAAS	WELL	H <sub>pred</sub> , H <sub>meas</sub>	20391000	39569000
MAAS	SAMBEEK BOVEN	H <sub>pred</sub> , H <sub>meas</sub>	19665000	40579000
MAAS	SAMBEEK BENEDEN	H <sub>pred</sub> , H <sub>meas</sub>	19600000	40607000
MAAS	GENNEP	H <sub>pred</sub> , H <sub>meas</sub>	19435000	41222000
MAAS	MOOK	H <sub>pred</sub> , H <sub>meas</sub>	18862000	41853000
MAAS	GRAVE BOVEN	H <sub>pred</sub> , H <sub>meas</sub>	17921000	42008000
MAAS	GRAVE BENEDEN	H <sub>pred</sub> , H <sub>meas</sub>	17909000	42025000
MAAS	MEGEN	H <sub>meas</sub> , Q <sub>meas</sub> , H <sub>pred</sub> , Q <sub>pred</sub>	16735000	42649000
MAAS	LITH BOVEN	H <sub>pred</sub> , H <sub>meas</sub>	15961000	42453000
MAAS	LITH DORP	H <sub>pred</sub> , H <sub>meas</sub>	15814000	42456000
MAAS	HEESBEEN	H <sub>pred</sub> , H <sub>meas</sub>	13687000	41638000
MAAS	KEIZERSVEER	H <sub>pred</sub> , H <sub>meas</sub>	12095000	41472000

(1) H<sub>meas</sub> = measured water level

Q<sub>meas</sub> = real time flow measured directly or deduced from a rating curve

H<sub>pred</sub> = water level predicted by a model

Q<sub>pred</sub> = predicted flow by modelling



**6. Germany**

River	Station	Type of data <sup>(1)</sup>	X and Y coordinates (Projection system = Lambert 93)	
			X	Y
RUR	STAH	H <sub>meas</sub>	297245	5664668
SCHWALM	PEGEL LANDESGRENZE	H <sub>meas</sub>	296679	5679245
NIERS	GOCH	H <sub>meas</sub>	303033	5729732

(1) H<sub>meas</sub> = measured water level