

Encoding Guide for Notices to Skippers

Version 0.5, 2008-12-01

Document history

version	date	author	adopted by	remarks
0.3	2007-10-02	Lucia Karpatyova		Amended WERM message
0.4	2008-08-01	Lucia Karpatyova		Design changes
0.5	2008-12-01	Lucia Karpatyova		CR 058

Basic considerations

1. **Selection of the type of Notice:**
 - **Ftm (for waterways):** Choose this type if you want to create a „Fairway and traffic related message“, which is referred to sections of waterways.
 - **Ftm (for objects):** Choose this type if you want to create a „Fairway and traffic related message“, which is referred to objects (e.g. bridges, locks etc.).
 - **Wrm:** Choose this type if you want to create a „Water level related message“, which enables you to create information on current as well as predicted water levels. The Water level related message section contains measurements for an Object.
 - **Icem:** Choose this type if you want to create an „Ice message“. The Ice message section contains information about the ice conditions and for a fairway(link).
2. **In one message at least 2 sections have to be filled in:**
 - the identification section
 - one of the sections:
 - Fairway and traffic related messages (Ftm),
 - Water level related message (Wrm)
 - Ice message. (Icem)
3. **New Ftm-Notice or update to an existing Ftm-Notice?**
 If an update to an already published Ftm-Notice to Skippers has to be produced or a Ftm-Notice has to be withdrawn, the original Ftm-Notice has to be copied.
 - The number stays the same,
 - the serial number has to be increased by 1,
 - the content (e.g. time of validity) has to be adapted.
4. **Ftm-Notices for several sections of waterways**
 One Ftm-Notice may contain several fairway_sections.
5. **Ftm-Notices for several objects on a waterway section**
 The fairway_section, which is defined by the begin and end coordinates, has to contain all the objects. One Ftm-Notice with one fairway-section may contain several object_sections.
6. **Ftm-Notices for several sections of waterways on one hand and several objects on the other hand**
 A combination of notices for waterway_sections (without objects) and notices for objects within one ftm-notice is not possible.
 One ftm-notice has to refer
 - to one or several fairway sections or
 - to on or several objects within one fairway_section.
7. **Decimals in numeric fields are indicated with a . (period). No thousand separators are used.**

Frequent mistakes

T.b.a.

Nr.	Tag (Group headers and closers are boldly printed)	meaning of tag (according to reference table Tags)	Description	Mandatory/ Conditional	Rule applic-able
	<?xml version="1.0" encoding="utf-8" ?>				
	<RIS Message>	RIS message	<i>Notice to Skippers</i>		
1s	<identification>	(identification section)	Identification section (each message has to contain an identification section)	M	
1.1	<from>String</from>	Sender of the message	Sender of the message	M	
1.2	<originator>Riza</originator>	Originator of the information	Originator (initiator) of the information in this message	M	
1.3	<country_code>CH</country_code>	Country where message is valid	Country where message is valid (select a code from the reference table)	M	
1.4	<language_code>HU</language_code>	Original language	Original language (select a code from the reference table)	M	
1.5	<district>WaddenZee</district>	District/region within country	District / Region within the specified country, where the message is applicable	C	
1.6	<date_issue>20011231</date_issue>	Date of issue	Date of editing (format yyyymmdd)	C	
1.7	<time_issue>1145</time_issue>	Time of issue	Time of editing (format hhmm)	C	
1e	</identification>				
2s	<ftm>	Fairway and traffic related message	Fairway and traffic related section (see basic considerations 1 and 2)	C	
2.1	<year>2001</year>	Year	Year of first issuing of the notice	M	
2.2	<number>9999</number>	Number (of the notice)	Number of the notice (per year)	M	
2.3	<serial_number>99</serial_number>	Serial number	Serial no of notice (replacements and withdrawals) The default value is 00 being the first release of the notice. If you provide an update or a withdrawal, this number is increased by 1.	M	
2.4s	<target_group>	(Target group section)	<i>Target group information</i> If one notice contains different limitations for different target groups or different communication information for different limitations, several fairway and traffic related sections with the same number can be used.	C	
2.4.1	<target_group_code>ALL</target_group_code>	Target group code	Target group (vessel type) for this message (select a code from the reference table, default value is "ALL")	M	
2.4.2	<direction_code>ALL</direction_code>	Traffic direction code	Applicability of the message for upstream or downstream traffic, or both (select a code from the reference table, default value is "ALL")	M	
2.4e	</target_group>				

Nr.	Tag (Group headers and closers are boldly printed)	meaning of tag (according to reference table Tags)	Description	Mandatory/ Conditional	Rule applic- able
2.5	<code><subject_code>OBSTRU</subject_code></code>	Subject	Subject code Blockage In case no form of navigation is possible: • through all the lock chambers of a lock; • through all the passages of a bridge; • passing a specified point on the fairway; • on a specified section of the fairway. Partial obstruction In case limited navigation is possible: • through one or more lock chambers of a lock, leaving at least one open; • through one or more passages of a bridge, leaving at least one open; • passing a specified point on the fairway, leaving a part of the fairway open. The limitation code for the blocked lock chamber, bridge opening etc. is "OBSTRU" Delay In case an obstruction occurs, limited in time, at a bridge, lock or on a section, between a specified start and end date. For example. Delay of at most 2 hours on November 13 between 08:00 and 17:00: <pre> date_start: 20021113 date_end: 20021113 time_start: 0800 time_end: 1700 limitation_code: Delay Position_code: all value: 2 </pre> No service In case a movable bridge is not operated during a specified period. This period should lie within the normal operating hours. No service of a lock is an Obstruction or Delay. No service of a movable bridge means that passing under the bridge still is possible. Otherwise it is an Obstruction. Change Service In case a modification in the normal operating hours occurs at a lock or bridge Normally this means a limitation of the operating hours, due to work, rather than an increase. A limitation in the operating hours of a lock usually implies an obstruction For example if a lock normally is operated between 06:00 and 20:00, and the operating hours are now limited to between 10:00 and 14:00, then this will result in an obstruction between 06:00 and 10:00 and another obstruction between 14:00 and 20:00. A limitation in the operating hours of a bridge usually implies "No Service". Vessel length In case somewhere a smaller maximum length for passing vessels is allowed / possible. Usually this occurs at a lock (half lock chamber). Clearance width In case somewhere a smaller maximum width for passing vessels is available. This occurs during work on a lock / bridge. This subject is also used if the available width of the fairway is less, even if this has no influence on the maximum available width of the waterway. Vessel air draught In case somewhere a smaller maximum height for passing vessels is allowed. Clearance height This occurs also if the vertical clearance is locally decreased by for example painting equipment Vessel draught In case somewhere a smaller maximum draught for passing vessels is allowed.	M	

Nr.	Tag (Group headers and closers are boldly printed)	meaning of tag (according to reference table Tags)	Description	Mandatory/ Conditional	Rule applic-able
2.5	<code><subject_code>OBSTRU</subject_code></code>	Subject	<i>Subject code (continue...)</i> Available depth In case the least sounded depth is modified. This has no impact on the maximum draught. No mooring In case somewhere on the fairway mooring is not allowed. Change of marks In case a change occurs in the fairway marks used for navigational purposes, such as buoys, beacons, sector lights, notice marks, etc. Encoding of "Change marks" can be used for NEW MARKS as it indicates the change from the state "no marks" to "some marks". Work Other activities on or near the fairway which do not fall within the mentioned subjects Dredging Dredging activities for which none of the other mentioned subjects are valid Exercises Exercises for which none of the other mentioned subjects are valid Event Events (rowing competitions, fireworks etc.) where none of the other mentioned subjects are valid Announcement All other notices where none of the other (structured) subjects are valid Notice withdrawn The message has to be published as a serial number of the original message <i>If for one single message more subjects are possible, then the limitation with the greatest impact on shipping traffic is selected.</i>		
2.6s	<code><validity_period></code>	Period of validity	<i>Overall period of validity (This information will be used by applications to select the Notices, which are to be displayed for a specific voyage)</i>	M	
2.6.1	<code><date_start>20011231</date_start></code>	From (yyyymmdd)	Start date of validity period (format yyyymmdd)	M	
2.6.2	<code><date_end>99999999</date_end></code>	Until (yyyymmdd)	End date of validity period (format yyyymmdd, indefinite: 99999999)	M	
2.6e	<code></validity_period></code>				
2.7	<code><contents>String</contents></code>	Contents	Contents / notice text in original language The standardized part should cover all the information which is - important for the safety of Inland Navigation (for example: sunken small craft on the right side of the fairway at the Danube, river-km 2010) - needed for voyage planning (for example: closure of locks, reduction of vertical clearance,...) Only additional information (for example: cause of the closure of a lock) should be provided as free text.	C	
2.8	<code><source>String</source></code>	Notice source (authority)	Notice source (authority)	C	
2.9	<code><reason_code>REPAIR</reason_code></code>	Reason of notice	Reason / justification of notice (select a code from the reference table)	C	
2.10s	<code><communication></code>	(Communication section)	<i>Communication channel information</i>	C	
2.10.1	<code><reporting_code>INF</reporting_code></code>	Reporting regime	Reporting regime (information or duty to report) (select a code from the reference table)	M	5
2.10.2	<code><communication_code>TEL</communication_code></code>	Means of communication	Communication code (telephone, VHF etc.) (select a code from the reference table)	M	5
2.10.3	<code><number>String</number></code>	Number or address	Telephone, VHF number and name of vessel or station, e-mail address, URL or teletext	C	5
2.10e	<code></communication></code>				



Nr.	Tag (Group headers and closers are boldly printed)	meaning of tag (according to reference table Tags)	Description	Mandatory/ Conditional	Rule applic-able																																								
2.11s	<fairway_section>	Waterway or fairway section	Fairway section, also available for objects (no. 2.12) (see also basic considerations)	M																																									
2.11.1s	<geo_object>	(geo information of waterway)	Geo information of fairway	M																																									
2.11.1.1	<id>String</id>	Identification	Unique id of the fairway section (1x or 2x) The LOCODE according to the Ship Reporting Standard has to be used as unique ID. (Local) Name of the fairway section (f.e.: Rhine between bridge A and bridge B)	M																																									
2.11.1.2	<name>String</name>	Name of geo object		M																																									
2.11.1.3	<type_code>FWY</type_code>	(type of waterway)	Type of geographical object (select a code from the reference table, default value is FWY)	M																																									
2.11.1.4s	<coordinate>	Fairway begin and end coordinates	Fairway section begin and end coordinates (2x)	C	7																																								
2.11.1.4.1	<lat>42 34.1234 N</lat>	Latitude (decimal)	Lat Long coordinates are referred to WGS 84 and presented in degrees and minutes with at least three, but preferable four decimals (dd mm.mmmm N, ddd mm.mmmm E)	M	5																																								
2.11.1.4.2	<long>123 45.1234 E</long>	Longitude (decimal)		M	5																																								
2.11.1.4e	</coordinate>																																												
2.11.1e	</geo_object>																																												
2.11.2s	<limitation>	Limitation section	Fairway section limitations Notices can be divided into two categories, namely URGENT and NOT URGENT. Urgent notices always contain a limitation for shipping traffic. There must therefore be one or more records in the limitations section. If there is no limitation, section the message is not urgent.	C																																									
2.11.2.1s	<limitation_period>	(Limitation) periods/intervals	Limitation periods / intervals Examples for the encoding of limitation periods:	C																																									
			<table> <tr> <th>Limitation period</th><th>date_start</th><th>date_end</th><th>time_start</th><th>time_end</th><th>Interval_code</th></tr> <tr> <td>2005-01-01, 07:00 to 2005-01-31, 20:00</td><td>20050101</td><td>20050131</td><td>0700</td><td>2000</td><td>(Continuous)</td></tr> <tr> <td>2005-01-01 to 2005-01-31, each day from 07:00 to 20:00</td><td>20050101</td><td>20050131</td><td>0700</td><td>2000</td><td>Daily</td></tr> <tr> <td>2005-01-01 to 2005-01-31, every working day (Monday to Friday) from 07:00 to 20:00</td><td>20050101</td><td>20050131</td><td>0700</td><td>2000</td><td>Monday to Friday</td></tr> <tr> <td rowspan="3">2005-01-01 to 2005-01-21, each week from Monday 07:00 to Friday 20:00</td><td>20050103</td><td>20050107</td><td>0700</td><td>2000</td><td>(Continuous)</td></tr> <tr> <td>20050110</td><td>20050114</td><td>0700</td><td>2000</td><td>(Continuous)</td></tr> <tr> <td>20050117</td><td>20050121</td><td>0700</td><td>2000</td><td>(Continuous)</td></tr> </table>	Limitation period	date_start	date_end	time_start	time_end	Interval_code	2005-01-01, 07:00 to 2005-01-31, 20:00	20050101	20050131	0700	2000	(Continuous)	2005-01-01 to 2005-01-31, each day from 07:00 to 20:00	20050101	20050131	0700	2000	Daily	2005-01-01 to 2005-01-31, every working day (Monday to Friday) from 07:00 to 20:00	20050101	20050131	0700	2000	Monday to Friday	2005-01-01 to 2005-01-21, each week from Monday 07:00 to Friday 20:00	20050103	20050107	0700	2000	(Continuous)	20050110	20050114	0700	2000	(Continuous)	20050117	20050121	0700	2000	(Continuous)		
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	20050110	20050114	0700	2000	(Continuous)																																								
	20050117	20050121	0700	2000	(Continuous)																																								
2.11.2.1.1	<date_start>20011231</date_start>	From (yyyymmdd)	Start date of limitation period (overall) (format yyyymmdd)	M	5																																								
2.11.2.1.1	<date_end>20011231</date_end>	From (yyyymmdd)	Start date of limitation period (overall) (format yyyymmdd)	M	5																																								
2.11.2.1.2	<time_start>1420</time_start>	Until (yyyymmdd)	End date of limitation period (format yyyymmdd)	C																																									
2.11.2.1.3	<time_end>0500</time_end>	From (hhmm)	Start time of limitation period (format hhmm)	C																																									
2.11.2.1.4	<interval_code>SAT</interval_code>	Until (hhmm)	End time of limitation period (format hhmm)	C																																									
2.11.2.1.5	<date_start>20011231</date_start>	Interval	Interval for limitation if applicable (select a code from the reference table)	C																																									
2.11.2.1e	</limitation_period>																																												
2.11.2.2	<limitation_code>OBSTRU</limitation_code>	Kind of limitation	Kind of limitation (select a code from the reference table)	M	5																																								
2.11.2.3	<position_code>AL</position_code>	Position (of limitation)	Position, which side (select a code from the reference table, default value is AL)	M	5																																								
2.11.2.4	<value>3.14159</value>	Numerical value (of limitation)	Value of limitation (i.e. max draught), Only cm, m ³ /s, h, km/h and kW are allowed to be used as units.	C																																									
2.11.2.5	<reference_code>NAP</reference_code>	Value reference	Value reference (select a code from the reference table)	C																																									
2.11.2.6	<indication_code>MAX</indication_code>	Indication of the type of value	Indication of the type of value (select a code from the reference table)	C																																									

Nr.	Tag (Group headers and closers are boldly printed)	meaning of tag (according to reference table Tags)	Description	Mandatory/ Conditional	Rule applic- able
2.11.2e	</limitation>				
2.11.e	</fairway_section>				
2.12s	<object>	Object	<i>Object section (see also basic considerations)</i>	C	
2.12.1s	<geo_object>	(geo information of object)	<i>Geo Information of object</i>	M	5
2.12.1.1.	<id>String</id>	Identification	Unique id of the geographical object The LOCODE according to the Ship Reporting Standard has to be used as unique ID.	M	5
2.12.1.2	<name>String</name>	Name of geo object	(Local) Name of the geographical object	M	5
2.12.1.3	<type_code>FWY</type_code>	(Type of object)	Type of geographical object (select a code from the reference table)	M	5
2.12.1.4s	<coordinate>	Object coordinates	<i>Object coordinates (1x)</i>	C	8
2.12.1.4.1	<lat>42 34.1234 N</lat>	Latitude (decimal)	Lat Long coordinates are referred to WGS 84 and presented in degrees and minutes with at least three, but	M	5
2.12.1.4.2	<long>123 45.1234 E</long>	Longitude (decimal)	preferable four decimals (dd mm.mmmm N, ddd mm.mmmm E)	M	5
2.12.1.4e	</coordinate>				
2.12.1e	</geo_object>				
2.12.2s	<limitation>	Limitation section	<i>Object limitation section</i> <i>Notices can be divided into two categories, namely URGENT and NOT URGENT. Urgent notices always contain a limitation for shipping traffic. There must therefore be one or more records in the limitations section. If there is no limitation section the message is not urgent.</i>	C	
2.12.2.1s	<limitation_period>	Limitation (periods/intervals)	<i>Limitation periods / intervals</i> <i>For examples see limitation_period in the fairway_section</i>	C	
2.12.2.1.1	<date_start>20011231</date_start>	From (yyyymmdd)	Start date of limitation period (overall) (format yyyymmdd)	M	5
2.12.2.1.2	<date_end>20011231</date_end>	Until (yyyymmdd)	End date of limitation period (format yyyymmdd)	C	
2.12.2.1.3	<time_start>1420</time_start>	From (hhmm)	Start time of limitation period (format hhmm)	C	
2.12.2.1.4	<time_end>0500</time_end>	Until (hhmm)	End time of limitation period (format hhmm)	C	
2.12.2.1.5	<interval_code>SAT</interval_code>	Interval	Interval for limitation if applicable (select a code from the reference table)	C	
2.12.2.1e	</limitation_period>				
2.12.2.2	<limitation_code>OBSTRU</limitation_code>	Kind of limitation	Kind of limitation (select a code from the reference table)	M	5
2.12.2.3	<position_code>AL</position_code>	Position (of limitation)	Position, which side (select a code from the reference table, default value is AL)	M	5
2.12.2.4	<value>3.14159</value>	Numerical value (of limitation)	Value of limitation (i.e. max draught), Only cm, m³/s, h, km/h and kW are allowed to be used as units.	C	
2.12.2.5	<reference_code>NAP</reference_code>	Value reference	Value reference (select a code from the reference table)	C	
2.12.2.6	<indication_code>MAX</indication_code>	Indication of the type of value	Indication of the type of value (select a code from the reference table)	C	
2.12.2e	</limitation>				
2.12^e	</object>				
2e	</ftm>				

3s	<wrm>	Water related message	Water level related section	C	
3.1s	<validity_period>	Period of validity	<i>Overall period of validity of water level message</i>	C	
3.1.1	<date_start>20011231</date_start>	From (yyyymmdd)	Start date of validity period (format yyyymmdd)	M	5
3.1.2	<date_end>20020102</date_end>	Until (yyyymmdd)	End date of validity period (format yyyymmdd) 99999999 for indefinite validity should not be used, because it is not possible to withdraw the message	M	5
3.1e	</validity_period>				
3.2s	<geo_object>	(geo information of object)	<i>Geo Information of measurement location, tide gauge</i>	M	5
3.2.1	<id>String</id> (Waterway section)	Identification	Unique id of the geographical object The LOCODE according to the Ship Reporting Standard has to be used as unique ID.	M	5
3.2.2	<name>String</name> (Pegelname)	Name of geo object	(Local) Name of the geographical object	M	5
3.2.3	<type_code>FWY</type_code>	(Type of object)	Type of geographical object (select a code from the reference table, default value is FWY)	M	5

Nr.	Tag (Group headers and closers are boldly printed)	meaning of tag (according to reference table Tags)	Description	Mandatory/ Conditional	Rule applic-able
3.2.4s	<coordinate>	Object coordinates or fairway begin and end coordinates	Object coordinates (1x or 2x)	C	9
3.2.4.1	<lat>42 34.1234 N</lat>	Latitude (decimal)	Lat Long coordinates are referred to WGS 84 and presented in degrees and minutes with at least three, but preferable four decimals (dd mm.mmmm N, ddd mm.mmmm E)	M	5
3.2.4.2	<long>123 45.1234 E</long>	Longitude (decimal)		M	5
3.2.4e	</coordinate>				
3.2.e	</geo_object>				
3.3	<reference_code>NAP</reference_code>	Value reference	Value reference (measurement reference) (select a code from the reference table)	M	6
3.4s	<measure>	Measurements (normal or predicted)	Measurements (normal or predicted values)	M	5
3.4.1	<predicted>1</predicted>	Prediction	Predicted measurement (1) or real measurement (0)	M	5
3.4.2	<measure_code>DIS</measure_code>	Kind of water related information	Kind of water level related information (select a code from the reference table)	M	5
3.4.3	<value>314159</value>	Numerical value (of measurement)	Value. Only cm, m ³ /s, h, km/h and kW are allowed to be used as units.	M	10
3.4.4	<difference>314159</difference>	Difference	Difference with previous measurement. Only cm, m ³ /s, h, km/h and kW are allowed to be used as units.	C	
3.4.5	<barrage_code>OPD</barrage_code>	Barrage	Barrage status (select a code from the reference table)	C	11
3.4.6	<regime_code>HIG</regime_code>	Water regime	Regime applicable (select a code from the reference table)	C	12
3.4.7	<measuredate>20011231</measuredate>	Measuredate (yyyymmdd)	Date of measurement (format yyyymmdd)	M	5
3.4.8	<measuretime>1420</measuretime>	Measuretime (hhmm)	Time of measurement (format hhmm)	M	5
3.4e	</measure>				
3e	</wrm>				
4s	<icem>	Ice message	Ice related section	C	
4.1s	<validity_period>	Period of validity	Overall period of validity of ice information	C	
4.1.1	<date_start>20011231</date_start>	From (yyyymmdd)	Start of validity period (format yyyymmdd)	M	5
4.1.2	<date_end>20011231</date_end>	Until (yyyymmdd)	End of validity period (format yyyymmdd) 99999999 for indefinite validity should not be used, because it is not possible to withdraw the message	M	5
4.1e	</validity_period>				
4.2s	<fairway_section>	Waterway or fairway section	Fairway	M	5
4.2.1	<geo_object>	(geo information of waterway)	Geo Information of fairway location	M	5
4.2.1.1	<id>String</id>	Identification	Unique id of the fairway section (1x or 2x) The LOCODE according to the Ship Reporting Standard has to be used as unique ID.	M	5
4.2.1.2	<name>String</name>	Name of geo object	(Local) Name of the fairway section	M	5
4.2.1.3	<type_code>FWY</type_code>	(type of waterway)	Type of geographical object (select a code from the reference table, default value is FWY)	M	5
4.2.1.4	<coordinate>	Fairway begin and end coordinates	Fairway section begin and end coordinates (2x)	C	
4.2.1.4.1	<lat>42 34.1234 N</lat>	Latitude (decimal)	Lat Long coordinates are referred to WGS 84 and presented in degrees and minutes with at least three, but preferable four decimals (dd mm.mmmm N, ddd mm.mmmm E)	M	5
4.2.1.4.2	<long>123 45.1234 E</long>	Longitude (decimal)		M	5
4.2.1.4e	</coordinate>				
4.2.1e	</geo_object>				
4.2.2s	<limitation>	Fairway section limitations			not applicable
4.2.2.e	</limitation>	Fairway section limitations			not applicable
4.2e	</fairway_section>				
4.3s	<ice_condition>	(Ice condition)	Ice conditions At least one of the conditional elements 4.3.3 to 4.3.6 have to be filled in.	M	5

Nr.	Tag (Group headers and closers are boldly printed)	meaning of tag (according to reference table Tags)	Description	Mandatory/ Conditional	Rule applic- able
4.3.1	<code><measuredate>20011231</measuredate></code>	Measuredate (yyyymmdd)	Date of measurement (format yyyymmdd)	M	5
4.3.2	<code><measuretime>1420</measuretime></code>	Measuretime (hhmm)	Time of measurement (format hhmm)	M	5
4.3.3	<code><ice_condition_code>A</ice_condition_code></code>	Ice condition	Condition code (select a code from the reference table) The thickness indicated in column 2 of the ice_condition_code gives information on average thickness only. The description has to be used to select the code for a specific situation.	C	4
4.3.4	<code><ice_accessibility_code>A</ice_accessibility_code></code>	Accessibility	Accessibility code (select a code from the reference table)	C	4
4.3.5	<code><ice_classification_code>A</ice_classification_code></code>	Ice classification	Classification code (select a code from the reference table)	C	4
4.3.6	<code><ice_situation_code>NOL</ice_situation_code></code>	Ice situation	Situation code (select a code from the reference table)	C	4
4.3e	<code></ice_condition></code>				
4e	<code></icem></code>				
5s	<code><werm></code>	Weather message	Weather related section	C	1
5.1s	<code><validity_period></code>	Period of validity	<i>Period of validity</i>	M	5, 13
5.1.1	<code><date_start>20011231</date_start></code>	From (yyyymmdd)	Start of validity period	M	5
5.1.2	<code><date_end>20011231</date_end></code>	Until (yyyymmdd)	End of validity period (indefinite: 99999999)	C	
5.1.3	<code><time_start>1420</time_start></code>	From (hhmm)	Start time of validity period	C	
5.1.4	<code><time_end>0500</time_end></code>	Until (hhmm)	End time of validity period	C	
5.1e	<code></validity_period></code>				
5.2s	<code><fairway_section></code>	Waterway or fairway section	<i>Fairway</i>	M	5
5.2.1s	<code><geo_object></code>	(geo information of waterway)	Geo Information of fairway location	M	5
5.2.1.1	<code><id>String</id></code>	Identification	Unique id of the fairway section (1x or 2x)	M	5
5.2.1.2	<code><name>String</name></code>	Name of geo object	(Local) Name of the fairway section	M	5
5.2.1.3s	<code><coordinate></code>	Fairway begin and end coordinates	Fairway section begin and end co-ordinates (2x)	C	
5.2.1.3.1	<code><lat>42 34.1234 N</lat></code>	Latitude (decimal)		M	5
5.2.1.3.2	<code><long>123 45.1234 E</long></code>	Longitude (decimal)		M	5
5.2.1.3e	<code></coordinate></code>				
5.2.1e	<code></geo_object></code>				
5.2e	<code></fairway_section></code>				
5.3s	<code><weather_report></code>	Weather report	<i>Weather Report (1x or 2x)</i>	M	5
5.3.1	<code><forecast>0</forecast></code>	Forecast	Actual or Forecast report	M	
5.3.2	<code><weather_class_code>ORAIN</weather_class_code></code>	Weather classification	Classification of weather report (0..Nx)	M	5, 14
5.3.3s	<code><weather_item></code>	Weather item	Weather items (0..Nx)	C	5
5.3.3.1	<code><weather_item_code>WI</weather_item_code></code>	Weather item	Weather item type (Wind, Wave etc)	M	5
5.3.3.2	<code><value_min>4</value_min></code>	Minimum value	Actual or Minimum value	M	
5.3.3.3	<code><value_max>5</value_max></code>	Maximum value	Maximum value	C	
5.3.3.4	<code><value_gusts>7</value_gusts></code>	Gusts value	Gusts value (Wind)	C	
5.3.3.5	<code><weather_category_code>2</weather_category_code></code>	Weather category	Classification of wind report	C	
5.3.3.6	<code><direction_code_min>W</direction_code_min></code>	Direction from	Direction of wind or wave	C	
5.3.3.7	<code><direction_code_max>N</direction_code_max></code>	Direction to	Direction of wind or wave	C	
5.3.3e	<code></weather_item></code>				
5.3e	<code></weather_report></code>				
5e	<code></werm></code>				
	<code></RIS_Message></code>				

Rules applicable to table 1:

- 5 If a conditional group contains mandatory subgroups or elements these are only mandatory if the group on the higher level is applied.
- 6 Only mandatory for water levels and vertical clearances
- 7 a fairway section is defined by the begin and end coordinates (2 sets of coordinates)
- 8 an object is defined by the coordinates of its center point (1 set of coordinates)
- 9 a wrm geo_object has 2 sets of coordinates in case the type_code is FWY, otherwise only 1 set of coordinates is to be used
- 10 Mandatory if measure_code is either "DIS", "VER", "LSD" or "WAL"
- 11 Mandatory if measure code is "BAR"
- 12 Mandatory if measure code = "REG"
- 13 Predictions for different periods require individual weather messages
- 14 May contain combinations of weather_class_code tags