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Translation

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Exceptional consignments - Outline procedure

Transports exceptionnels - Procédure des profils
Außergewöhnliche Sendungen - Umrissverfahren



UNION INTERNATIONALE DES CHEMINS DE FER
INTERNATIONALER EISENBAHNVERBAND
INTERNATIONAL UNION OF RAILWAYS

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V - Rolling stock

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Summary

UIC Leaflet 502-2

- defines the phrase "outline procedure for exceptional consignments",
- describes the calculation of route and consignment outlines.

UIC Leaflet 502-1 applies for the handling of exceptional consignments in international traffic.

UIC Leaflet 502-2 sets down the rules for the codification of the routes for the carriage of exceptional consignments with the outline procedure.

Consignments exceeding the loading gauge in accordance with *UIC Leaflet 502-1, point 1.2* which do not fulfil any of the other characteristics of an exceptional consignment, are handled under the outline procedure.

The critical points including the limitations in accordance with UIC loading directives *RIV, Appendix II, Vol 1 Table 2₁ or 2₃* may not lie outside the outermost line (9) of the outline procedure described in *UIC Leaflet 502-2*.

In the case of infrastructure managers/railways that have not yet introduced the outline procedure or that have introduced the outline procedure, but whose routes cannot be released for the requested consignment profile, the procedure according to *UIC Leaflet 502-1* should be followed.

The outline procedure should only be applied for a consignment if it can be used for the entire distance over which the consignment is carried.

1 - Outline procedure

1.1 - Fundamentals

1.1.1 - In the outline procedure:

- the available clearance gauge of the route (outline code of the route) - see Glossary - page 39) and
- the parts of the load that exceed the international loading gauge (see Glossary - page 39).

are described by an 8-digit code (outline code of the consignment).

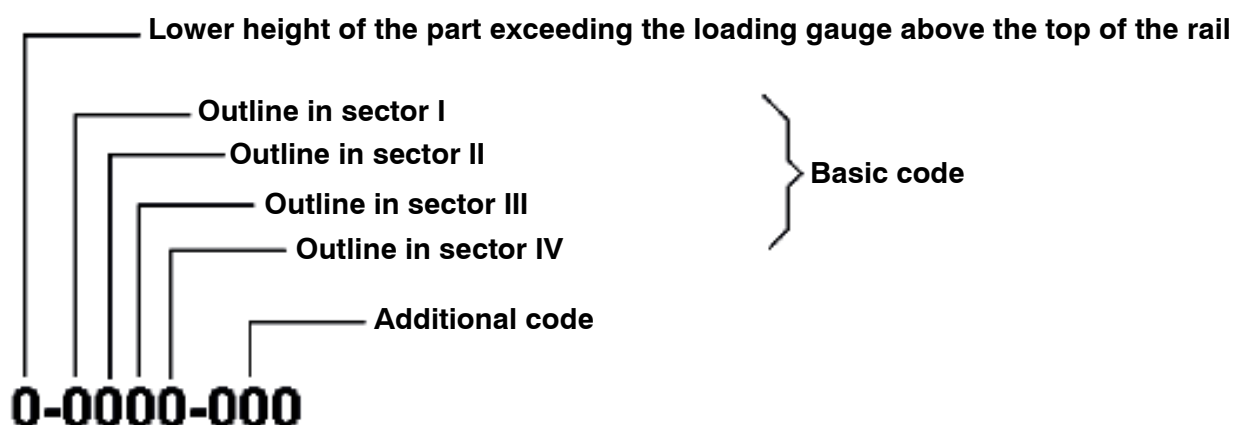
1.1.2 - The code is created on the basis of the outline procedure in accordance with Fig. 1 - page 4. It is divided into four sectors, which are designated with the Roman numerals I to IV. Each sector has individual groups of lines, which are identified by Arabic numerals. Sector III has two groups of lines:

- diagonal lines, which are also assigned Arabic numerals,
- vertical lines as a direct continuation of the lines of Sector II.

All outlines relate to the international loading gauge *RIV, Appendix II, Vol I, Table 1₁* - see Bibliography - page 41).

1.1.3 - The first position denotes the height above the top of the rail. The other four positions are the basic code and relate to the outlines in the individual sectors. The last three positions are the additional code to delineate the height of the outline described (in cm above the top of the rail).

The code of the lower height above the top of the rail and the additional code is separated from the basic code by the dash.



1.2 - Code of the lower height of the part of the consignment that exceeds the loading gauge above the top of the rail

The code describes the lower height above the top of the rail of the part of the consignment that exceeds the loading gauge and width in sector I. The meaning of the digits is as follows:

- The first digit (horizontal line):
 - Digit 0≥ 1 200 mm above top of rail
 - Digit 1≥ 1 060 mm above top of rail
 - Digit 2≥ 1 000 mm above top of rail
 - Digit 3≥ 850 mm above top of rail
 - Digit 4≥ 800 mm above top of rail
 - Digit 5≥ 600 mm above top of rail
- The second digit, the vertical line in Sector I.

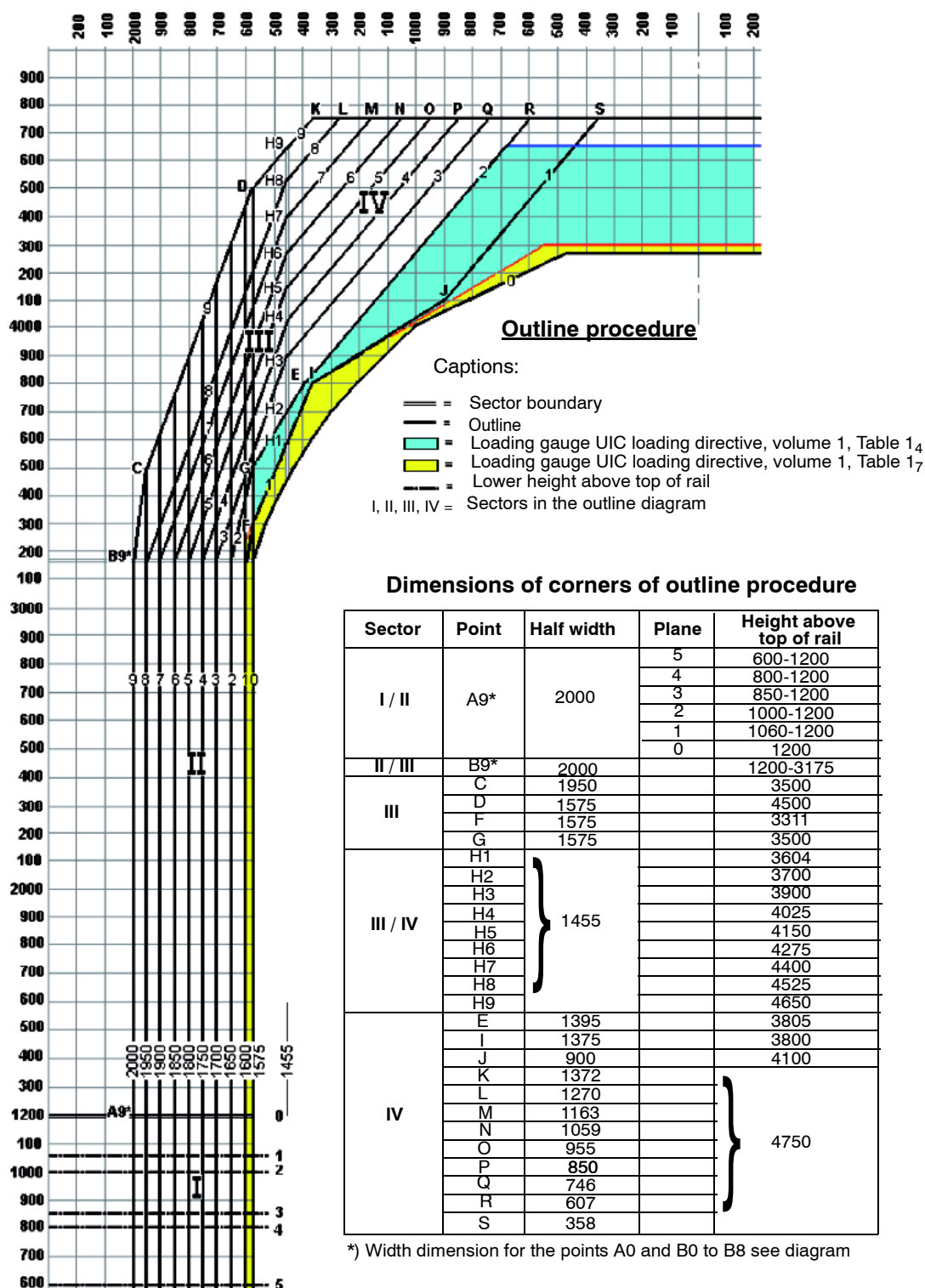


Fig. 1 - Outline procedure

1.3 - Basic code

1.3.1 - The basic code describes the route of the outline in four sectors, where:

- The first position denotes the line in sector I,
- The second position denotes the line in sector II and where applicable its vertical continuation in sector III to the intersection with a diagonal line in sector III,
- The third position denotes the line in sector III,
- The fourth position denotes the line in sector IV.

1.3.2 - At the boundary of sector I to sector II the following possibilities are permissible:

- Transition to a line of the sector II with the same, larger or smaller digit (e.g. code 2-33xx-xxx, or 3-54xx-xxx, or 4-68xx-xxx).
- If the first digit of the basic code is a zero, there must also be a zero at the second position. In this case, sector I is not utilised by the outline (e.g. code 0-01xx-xxx).

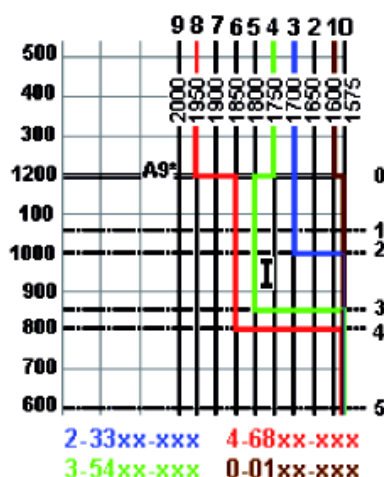


Fig. 2 - Sector I

1.3.3 - At the boundary of sector II to sector III, the following possibilities are permissible:

- The line in sector II is extended vertically over the sector boundary. It ends at the indicated diagonal line in sector III. (e.g.: code x-x34x-xxx).
- Transition to a line of sector III with the same or a lesser digit. (e.g.: code x-x22x-xxx, or x-x86x-xxx, or x-x50x-xxx).

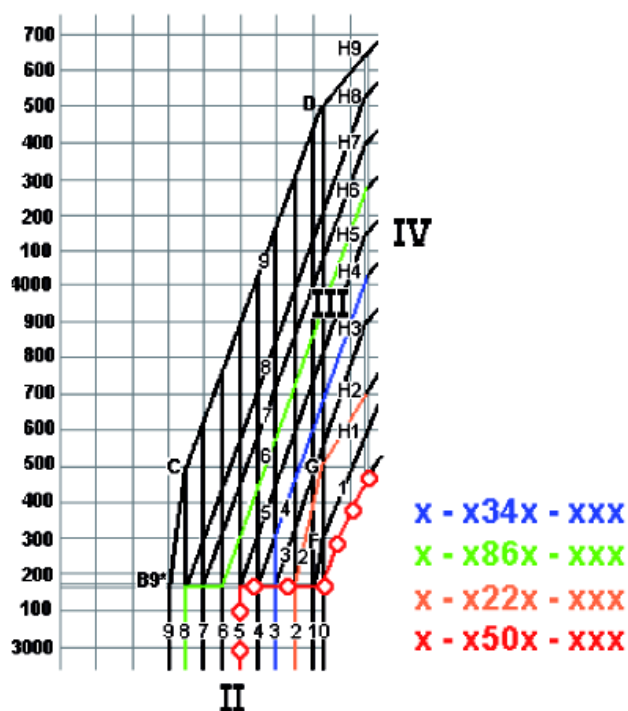


Fig. 3 - Sectors II and III

1.3.4 - At the boundary from sector III to sector IV the following possibilities are permissible:

- Transition to a line with the same or a greater digit (e.g.: code x-x44-xxx or x-xx79-xxx).

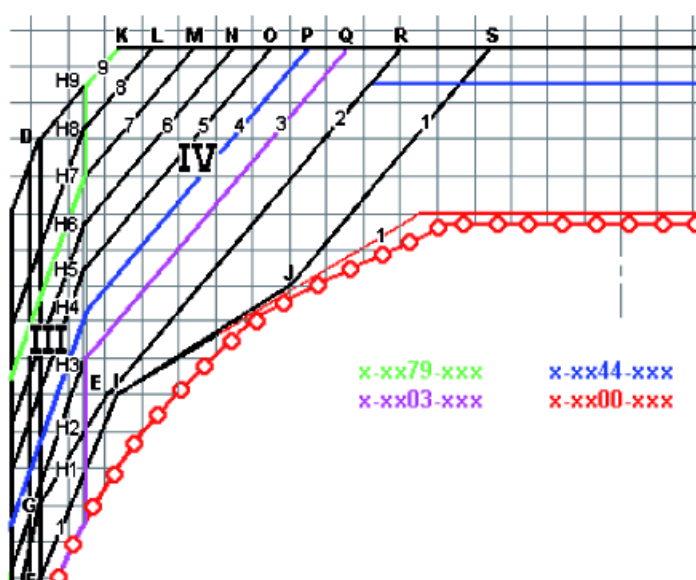
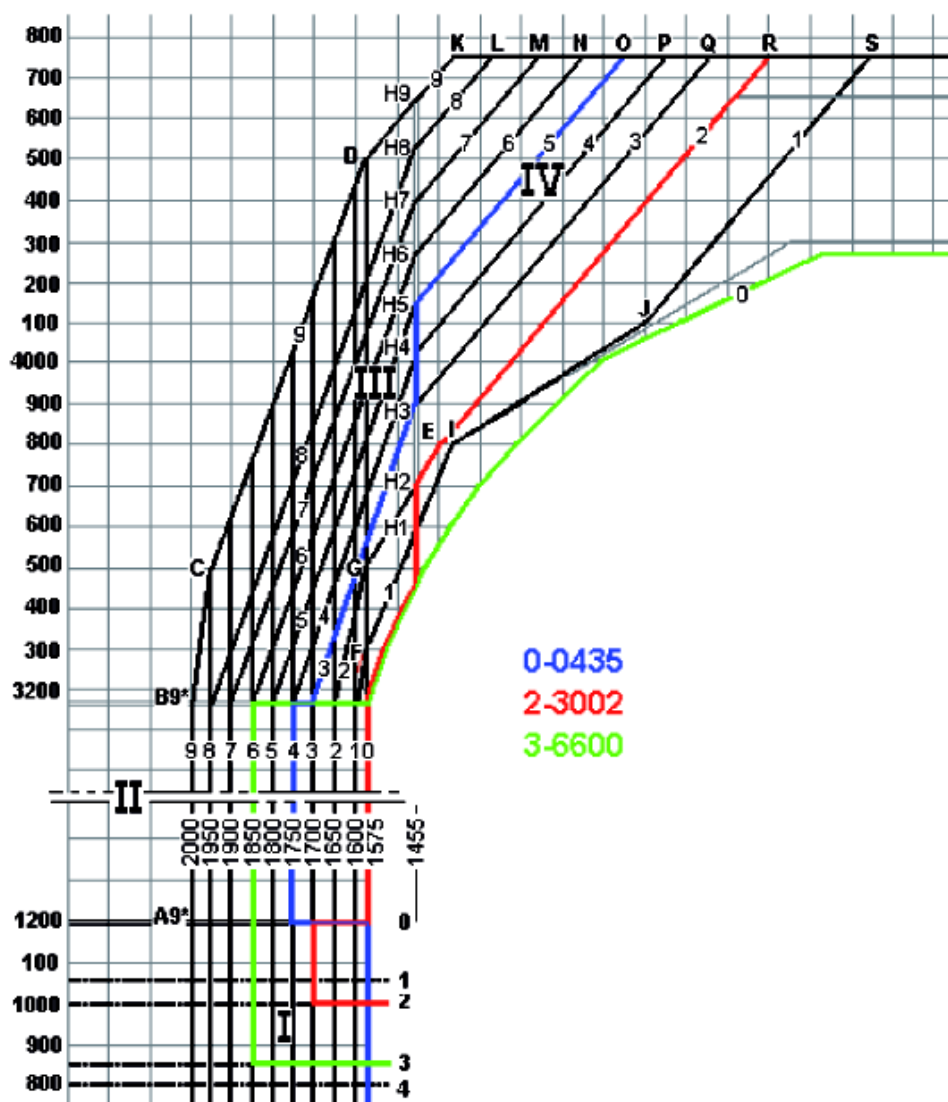


Fig. 4 - Sectors III and IV

1.3.5 - The basic code 0000 describes the international loading gauge.

- A zero at the first and second position of the basic code indicates compliance with the international loading gauge in sector I (e.g.: 0-0435).
- A zero at the first position of the basic code means that sector II is not affected by the consignment (e.g.: 2-3002)
- A zero at both the second and third positions of the basic code means the transition to the international loading gauge in sectors III/IV (e.g.: 3-6600).



1.4 - Additional code

1.4.1 - With the aid of the additional code it is possible to horizontally delineate each outline drawn by a primary code.

- The 3-digit additional code indicates the height in cm above the top of rail. (e.g.: outline code: 0-0499-396, 0-0388-434, 0-0235-475).

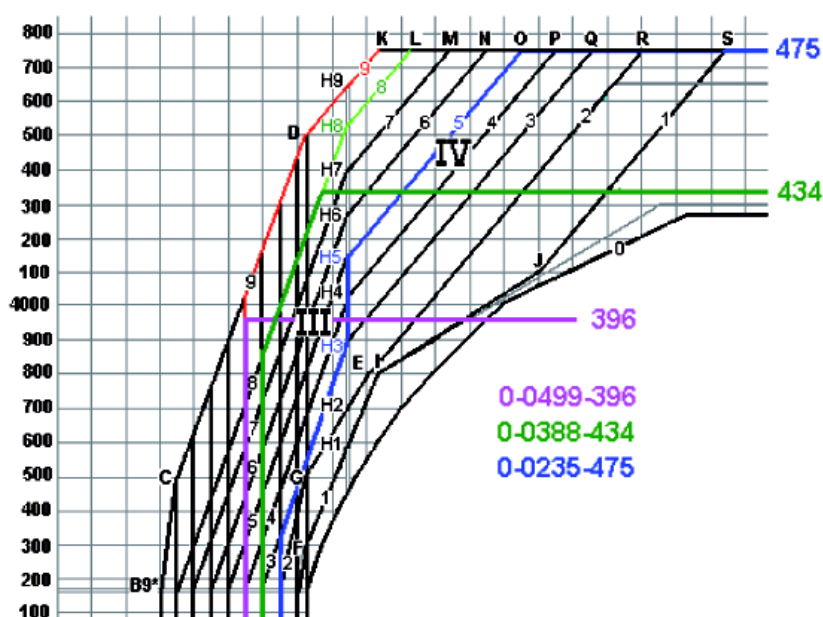


Fig. 6 - Additional code

1.4.2 - If a line of sector III branches horizontally, the third digit of the primary code is given the same code as the second position. (e.g.: outline code 0-0388-434).

If the horizontal branch in Sector III describes a rectangular profile (see Glossary - page 39), i.e. if the branch does not take place from a line but from a vertical, then the second and third positions of the primary code will indicate the line enveloping the corner point (e.g.: outline code 0-0499-396).

1.4.3 - If the outline described by the primary code is not cut horizontally in height, then the greatest height of the top boundary should be quoted as additional code (e.g.: outline code 0-0235-475).

2 - Determining the outline code for routes

2.1 - Checking the route sections and routes

2.1.1 - The outline code of the route section (of the route - see Glossary - [page 39](#)) describes the usable space for the carriage of consignments exceeding the loading gauge with the aid of an eight-digit code.

2.1.2 - The railway infrastructure companies/railways regularly check which outline codes are applicable on their routes using the outline procedure in accordance with Fig. 1 - [page 4](#).

2.1.3 - For the checking of routes, the following should be added to the dimensions yielded by the outline procedure:

- The dimension for operational irregularities, horizontal and vertical.
- The curve supplements of:
 - 53 mm on straight track,
 - 75 mm on a 250 m curve,
 - 105 mm on a 225 m curve,
 - 140 mm on a 200 m curve,
 - 155 mm on a 190 m curve,
 - 175 mm on a 180 m curve,
 - 245 mm on a 150 m curve,
 - 440 mm on a 120 m curve,
 - 645 mm on a 100 m curve,

The linear interpolation of the values is permissible.

The number of maximum speed limits in the carriage of the consignment exceeding the loading gauge is stipulated by each infrastructure company or each railway under its own responsibility.

2.1.4 - Several outline codes can be set for every route section if required. (e.g.: wide, medium, high - see Fig. 7 - [page 11](#)).

2.1.5 - Comprehensive instructions on the coding of the routes and route sections are provided in Appendix C - [page 21](#).

2.1.6 - The carriage conditions of the outline codes are defined by the infrastructure company and published in the profile catalogue (in the railway network conditions of use) for the RU ([see List of abbreviations - page 40](#)).

2.2 - Carriage profile

2.2.1 - Outline codes can be summarised in a profile. In these profiles the transition between outlines is only possible at the boundary between the sectors.

2.2.2 - The profile is defined taking into account operational effects.

2.3 - Macro profile

2.3.1 - If several outline codes are defined for route sections, there is the possibility of unifying these in macro profiles (see Glossary - [page 39](#) and Fig. 8 - [page 12](#)).

2.3.2 - Macro profiles are formed by outlines from all permitted individual carriage profiles in a certain route section.

The transition of the outlines can also take place within sectors.

2.4 - Directory of route data

2.4.1 - All published profiles are listed in Appendix [A - page 19](#).

2.4.2 - The routes and stations in which the individual profiles are valid are listed in point [B.1 - page 20](#).

2.4.3 - Macro profiles have special designations and are listed in point [B.2 - page 20](#).

2.4.4 - Each infrastructure company/railway notifies the general directorate of UIC, Railway Undertaking department in Paris of revisions to Appendices [A](#) and [B](#) without delay. The infrastructure companies/railways update these details regularly.

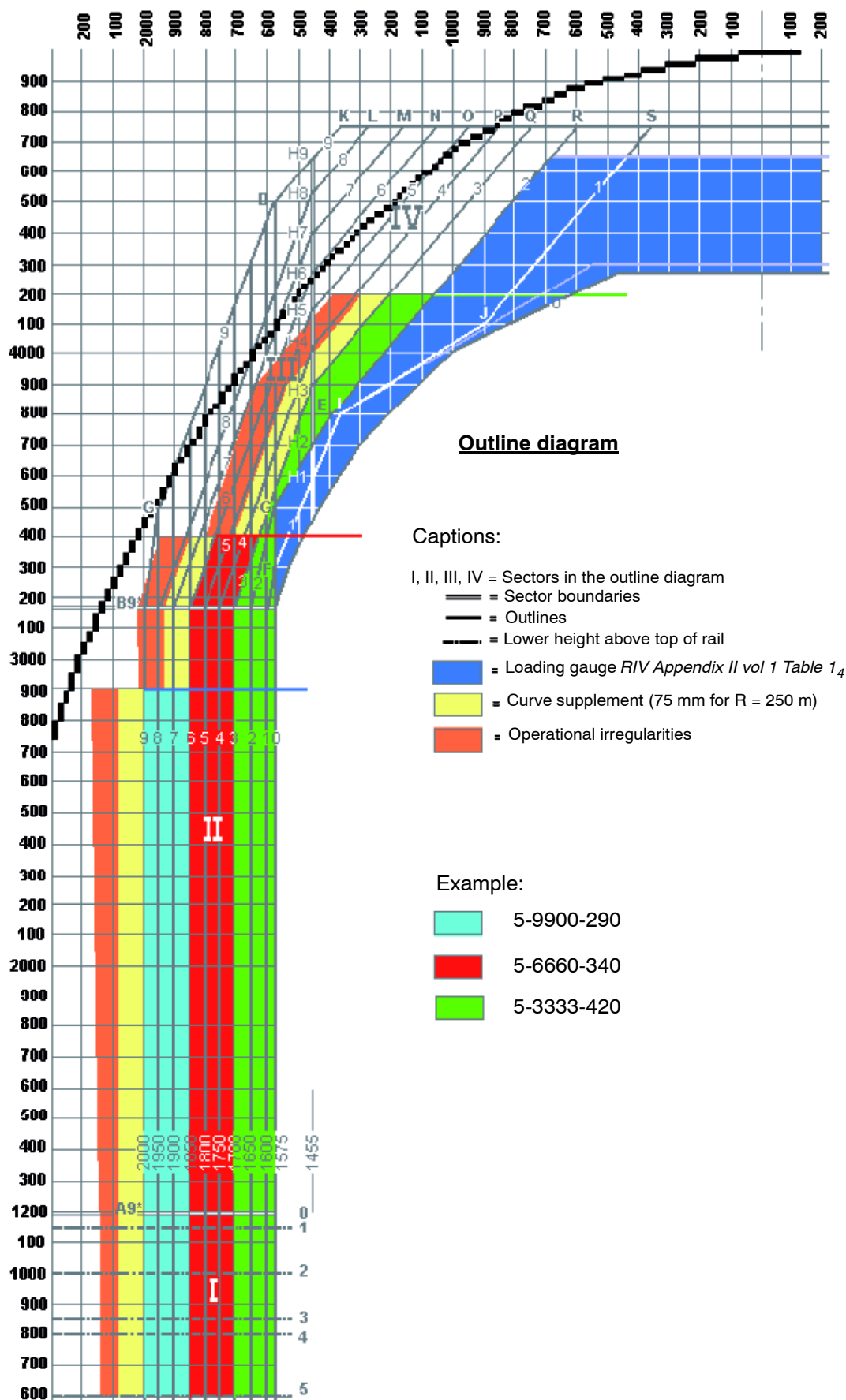


Fig. 7 - Example of coding possibilities