Machine-readable and interoperable age classification labels in Europe

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Implementation Strategy Report

Netherlands Institute for the Classification of Audiovisual Media (NICAM)

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1.1. About NICAM

NICAM stands for the Netherlands Institute for the Classification of Audio-visual Media. The institute enjoys broad support within the audio-visual sector in the Netherlands and is responsible for the administration of the Pan European Game Information system (PEGI), IARC and the coordination Kijkwijzer system and You Rate It.

Kijkwijzer

Kijkwijzer is a cross media classification system and warns parents and educators of children up to a certain age whether a television programme or film may be harmful. Kijkwijzer does this firstly by giving an age recommendation: All Ages, 6 years, 9 years, 12 years and 16 years. Pictograms are also used to show the reason for the recommendation: violence, fear, sex, discrimination, drug and/or alcohol abuse and coarse language:

AL = Not harmful / All Ages	= Violence
6 = Take care with children under 6	= Fear
9 = Take care with children under 9	= Sex
12 = Take care with children under 12	= Discrimination
16 = Take care with children under 16	= Drug and alcoholabuse
	= Coarse Language

Independent scientific research is the basis for the classification criteria: there is scientific evidence that there are harmful effects on children watching media. Kijkwijzer is a dynamic system; it will be (and has been) adapted in the case of new media developments (for example new TV formats, new animation techniques etc.) and new scientific developments (media effect studies). The system is based on the wishes and requirements of parents - as the central target group - and experts (independent academics). Before Kijkwijzer was created and built, an extensive survey among parents was carried out. One of the most important results was the finding that parents want to know the reason(s) for a particular age rating, what kind of content is decisive for an age rating.

Kijkwijzer was taken into practice in 2001. NICAM was set up by the public and commercial broadcasters, the sector organisations for cinema, film and DVD distribution and retailers. Kijkwijzer was set up at the request of and with assistance from the Dutch government.
The quality and effectiveness of Kijkwijzer has been recognised internationally. This is thanks to the unique cooperation between the audio-visual industry and the Dutch government. All commercial and public broadcasters, as well as the vast majority of film and DVD distributors, use Kijkwijzer. In this way, audio-visual media providers in the Netherlands take social responsibility in relation to the protection of children.

More than 2,200 companies and organisations are affiliated, either through their sector organisations or directly, to NICAM. NICAM's board consists of representatives of both public and commercial broadcasters, film distributors and cinema operators, distributors and retailers. The independent chair of the board is Mr Boris van der Ham.

NICAM is supported in the performance of its duties by an Advisory Committee. The members of this Advisory Committee are experts in the areas of media, youth, education and welfare, representatives of parents' organizations and other social organizations,. The actual implementation of Kijkwijzer is in the hands of the audio-visual institutions and companies.

The following umbrella organisations from the audio-visual sector participate in NICAM:

- Netherlands Association of Cinema Operators (NVB)
- Netherlands Association of Film Distributors (NVF)
- Netherlands Association of Producers and Importers of Picture and Sound Carriers (NVPI)
- Netherlands Association of Entertainment Retailers (NVER)
- Netherlands Broadcasting Corporation (NPO), which represents all national public service broadcasting organisations
- Association of Commercial Broadcasters (VCO), Local Broadcasters in The Netherlands (OLON)
- Regional Broadcasting Consultation and Collaboration (ROOS)
- Video on Demand Nederland (VodNed)

Finance
For the time being, half of NICAM's costs are paid for by the government and half by the audio-visual sectors. The media contribution is shared equally between the four sectors: public and commercial broadcasters, DVD distributors and film distributors/cinema operators.

How does Kijkwijzer work?
The affiliated broadcasters and distributors classify their productions themselves using the criteria drawn up by Kijkwijzer. The broadcasters' and distributors' own personnel are trained by NICAM to classify audio-visual productions on the basis of an extensive questionnaire, developed by a team of experts in the field of children and the media. Kijkwijzer is a dynamic system. Social developments, new academic insights and changes in the media landscape and content supply can lead to innovations in the Kijkwijzer system.

Quality
The quality of the classifications is monitored by NICAM on the basis of random samples. NICAM reports its findings annually to the Dutch Media Authority. By submitting complaints, the general public also contributes to monitoring the quality of the classifications. NICAM can then forward these complaints to an independent complaints committee. The complaints committee has the authority to correct the classification and to impose a penalty. The Kijkwijzer rules are laid down in (sub-)statutes.

The Kijkwijzer system is valid, this means that the questions in the coding form are drawn up in such a way that they result in the intended age ratings. In Kijkwijzer, coders are not

asked to give an age rating to media productions. They are asked to answer questions on the content of the production, and it is the answers to these questions about the content that determine the final age ratings. Validity also means that the answers about the content of the production lead to the age rating most parents would give to the media production in question on the basis of their experience with children. The system is reliable/ consistent; if various coders code one film or television programme, they arrive at the same coding result. The coding form is designed in such a way that every question has direct consequences for the age rating that follows from the answers. So the system is set up so that the chance of coders filling in the same response to any particular question is optimised. In addition, in government-commissioned research has investigated intercoder consistency.

Use

The vast majority of the general public in the Netherlands are familiar with Kijkwijzer. Parents of school-age children have great confidence in the Kijkwijzer recommendations. Almost all parents support the system and approximately 90% actually use Kijkwijzer when choosing television programmes, cinema films and DVDs. This has been demonstrated by research carried out by Intomart GfK. Children also regularly use Kijkwijzer. A survey carried out by the Jeugdjournaal [Children's News] among children aged 9 to 14 years revealed that many children use Kijkwijzer to make selective use of media. Kijkwijzer is therefore an extremely useful tool for both parents and children.

You Rate It

NICAM and the BBFC have together developed a tool for rating UGC across different territories and platforms. It is designed to enable those with responsibility for children to make fully informed viewing choices in relation to non-professional content online.

Through a single, simple, free to complete questionnaire, the tool instantaneously produces an age rating which will be stored in a cloud-based rating database. In this database unique URLs and ratings per country are stored which can be accessed by: websites, apps, filters, video websites, search functionalities, etc. The ratings can differ from country to country to reflect different national sensitivities and concerns over content. (For example, strong language is an issue for consumers in the UK but not in the Netherlands. The tool reflects such differences). Look and appearance can be fully customized to any website or platform. Unrated content could be identified as such by uploading sites and users would simply click on a "not (yet) rated" icon to rate it.

The tool is simple. It contains six questions about the content of the UGC, on behaviour, drugs, horror, language, sex and violence. Completing the questionnaire takes fewer than a couple of minutes. It also includes a facility for viewers to report to the appropriate law enforcement body content which in their view might be illegal.

Equally importantly, the tool is flexible. It is not designed to be used in a rigid way. Rather, its use can be adapted to meet the needs of different users. How it is used depends on what different countries, publics and platforms want.

For instance, the questionnaire may be completed by those uploading content while the content is being uploaded. Alternatively, it may be completed by those viewing the content. Or both. The role of existing classification bodies can be as extensive or as limited as users want. For example, in some countries, national classification bodies could act as an independent administrator to check a proportion of ratings and handle certain complaints about incorrect ratings.

The tool has the option of using either existing, well understood age ratings and labels or new, simplified ratings. This depends on the choices of different countries or platforms. The tool may also be linked to filtering devices to enable those with responsibility for children to prevent children accessing inappropriate content.

NICAM and the BBFC offer the UGC rating tool as an option for presently unrated non-professional content.

1.2. Legal background and political context

Kijkwijzer warns parents and guardians of children up to a certain age whether a film or television program may be harmful. To do this, Kijkwijzer and PEGI provide information in the form of warnings. However, there is also a legal side to the Kijkwijzer and PEGI age categories.

Legal background

According to the Dutch Media Act, organisations that intent to broadcast audiovisual content are obliged to join an officially acknowledged classification organization. Should they not comply with this, they are only allowed to air content that is suitable for all ages. NICAM is formally acknowledged by the involved Ministry to act as an classification institute and is responsible for the rating and the classification system. NICAM provides a constant evaluation of the classification criteria and training of coders, provides coordination of new initiatives and has a compliant procedure (including an appeal procedure) and can gives fines up to €75000,-.

On a second level the Dutch Media Authority is responsible for meta supervision of NICAM. NICAM reports annually on how the safeguard the quality of the coder classification as reliable, valid, stable, consistent and precise. The process is laid down in a covenant. On the basis of its research the Dutch Media Authority reports to the Ministry.

Furthermore, the Kijkwijzer ages are linked to broadcast slots. Programs with the classification All Ages, 6 and 9 years may be broadcast at any time of the day. Programs with the classification 12 years may only be broadcast from 20.00 hours and those with the classification 16 years from 22.00 hours.

Article 240a of the Criminal Code.
The government has associated statutory stipulations with each of the age classifications. These are laid down in Article 240a of the Dutch Criminal Code. This stipulates that films and DVDs may not be shown, sold, rented or lent out to children who are too young for these. The legislator applies the Kijkwijzer age classifications in the enforcement of this legislation.
This article states (verbatim): "Any person who delivers, distributes or shows to a minor, who is manifestly under age of sixteen, a pictorial representation or a data carrier containing a pictorial representation of an act which is seen to be damaging to persons under the age of sixteen, shall be liable to a term of imprisonment not exceeding one year or a fourth category of fine."

By virtue of this article, a cinema operator is committing a criminal offence if s/he allows a person younger than 16 to view a film with the age classification 16 years. Cinema operators are entitled to ask for proof of age or, if they suspect someone may be younger than 16 years of age, refuse admittance to a film with the age classification 16 years.

Video rental shops and shops are also covered by this law: they may not sell or rent out DVDs or games with an age classification of 16 years to persons under the age of 16. From 1 January 2005, it is compulsory for everyone over the age of 14 years to carry a valid proof of identity. The government has stated that Article 240a of the Criminal Code also applies to the other age categories. In February 2009, a voluntary agreement was signed between the sector organisations, NICAM and the Ministry of Justice. The aim of this is to facilitate better implementation of the age categories for audio-visual products in cinemas, shops, video rental shops and libraries. This voluntary agreement states that the 16 years age limit is to be enforced. In relation to the 12 years age category, the person's

age will always be asked in cases of doubt, whereby the answer will be considered to be correct.

In the case of cinemas, the government has provided for an exception that applies to children one or two years younger than the 12 or 16 years age limits, who may be admitted if they are accompanied by their own parent or caretaker. Cinemas are however not obliged to make use of this exception.

Any questions concerning enforcement or reports of failures to comply are not processed by NICAM, but by Verispect. www.verispect.nl provides further information or to make a report concerning the implementation of Kijkwijzer and/or PEGI in cinemas, shops, video rental shops or libraries. This will take you to the Verispect website.

Political context

As early as the beginning of the 1980s, politicians were pressing for self-regulatory measures within the audio-visual world, aimed at protecting young viewers against possible harmful effects. New impetus was given to this discussion with the explosion of the supply of audio-visual media, prompting the European Commission to call on all Member States to take action. This resulted, in 1997, in the policy document 'Niet voor alle leeftijden' ['Not for all ages']. This argued for the establishment of an independent body, which would act as the national support group for self-regulation within the audio-visual sector.

A range of representatives of the audio-visual sector responded to this call from the government. It was then decided in consultation to bring about such a self-regulatory body. This finally led, in 1999, to the establishment of the Netherlands Institute for the Classification of Audio-visual Media, or NICAM.

The institute was set up in close cooperation with the Ministry of Education, Culture & Science (OCW), the Ministry of Health, Welfare and Sport (VWS) and the Ministry of Justice. In turn, NICAM played an initiating and coordinating role in the development of Kijkwijzer, the new classification system that warns parents and educators of children up to a certain age whether a television programme or film may be harmful.

The legislative proposals that paved the way for Kijkwijzer were passed by a large majority in parliament in 2000. Most members of parliament expressed a preference for self-regulation and a belief that the audio-visual sector is capable of bearing the responsibility for this. In addition, NICAM's plans to provide information on the content of audio-visual productions, alongside the age recommendations, also met with appreciation. On 22 February 2001, the new legislation then passed into law. This replaced the old Film Censorship Act, thereby also heralding the end of film censorship.

Early in 2004, NICAM and Kijkwijzer were evaluated by the cabinet and parliament. There was appreciation of the results achieved within a short time. The conclusion was that, although there are certainly areas for improvement, NICAM works well.

The government closely monitors actual compliance with the self-regulatory measures. This supervisory role is delegated to the Media Authority, which regularly investigates and evaluates the functioning of the system of self-regulation. NICAM itself also performs regular quality assessments of compliance with the rules. In addition, it regularly tests consumer perception and use of Kijkwijzer.

2. Technological background

Since NICAM was established in 1999, all classifications were stored in a central database. The data have been made publically available since 2004 via the Kijkwijzer API. This webservice is a read only service providing 3rd parties with the XML rating data. The webservice has been created in Adobe ColdFusion.

Access to the data is restricted and is being granted by NICAM based on IP (range). Criteria for granting access is the non-commercial use of our ratings in a manner that is in line with our mission, informing consumers on possible harmfulness of audio-visual media.

The API is now being used by online retailers, movie websites and cinema's to collect and display the Kijkwijzer ratings and keep track of changes.

Within the API the following methods are available:
- returnGenres
- returnProductietypen (production type)
- returnProductieJaren (Year of production)
- returnLeeftijden (Age classification)
- returnPictogrammen (Classification pictograms)
- returnOrganisatieKenmerken (Organization features)
- returnDetails
- doSearch
- getChanged
- getRemoved

We will elaborate on each of these methods here:

returnGenres
Use this method to request a full list of genres. This list is specific to the different media types. This method has no arguments.
> Returned XML structure:
>> <genres>
>> <genre>
>> </genre>
>> </genres>

returnProductietypen (production type)
Use this method to request a full list of production types. This method has no arguments.
> Return XML structure:
>> <productietypen>
>> <productietype>
>> </productietype>
>> </productietypen>

returnProductieJaren (Year of production)
Use this method to request a full list of years of production. This method has no arguments.

Return XML structure:

```
<uitgavejaren>
<productiejaar>
<identifier></identifier>
<titel></titel>
</productiejaar>
</uitgavejaren>
```

returnLeeftijden (Age classification)
Use this method to request a full list of age classifications. This method has no arguments.

Return XML structure:

```
<leeftijden>
<leeftijd>
<identifier></identifier>
<titel></titel>
</leeftijd>
</leeftijden>
```

returnPictogrammen (Classification pictograms)
Use this method to request a full list of pictograms for each classification. This method has no arguments.

Return XML structure:

```
<pictogrammen>
<pictogram>
<identifier></identifier>
<titel></titel>
</picotgram>
</pictogrammen>
```

returnOrganisatieKenmerken (Organization features)
Use this method to request a full list of organization features. This method has no arguments.

Return XML structure:

```
<organisatiekenmerken>
<organisatiekenmerk>
<identifier></identifier>
<titel></titel>
</organisatiekenmerk>
</organisatiekenmerken>
```

returnDetails
Use this method to request the production details. The arguments attached to this function need to be in XML structure. The name of the argument variable is: "XMLARGS".

Arguments XMLARGS
Number (required)

XML argument structure:
The variable XMLARGS contains a string, in XML format, with the following structure:

```
<args>
<nummer value=""/>
</args>
```

Returned XML structure for an AV production:
```
<productie>
<nummer></nummer>
<titel></titel>
<ondertitel></ondertitel>
<productietype></productietype>
<genre></genre>
<regisseur></regisseur>
<producent></producent>
<lengteorigineel></lengteorigineel>
<lengtebewerkt></lengtebewerkt>
<seizoen></seizoen>
<productiejaar></productiejaar>
<nfc_nummer></nfc_nummer>
<datum></datum>
<pictogrammen></pictogrammen>
<allpictogrammen></allpictogrammen>
<rechthebbende></rechthebbende>
<organisatie></organisatie>
</productie>
```

Returned XML structure for a music video:
```
<productie>
<nummer></nummer>
<titel></titel>
<ondertitel></ondertitel>
<genre></genre>
<artiest></artiest>
<productiejaar></productiejaar>
<datum></datum>
<pictogrammen></pictogrammen>
<allpictogrammen></allpictogrammen>
<organisatie></organisatie>
</productie>
```

doSearch
Use this method to find productions based on specific criteria. The arguments attached to this function need to be in XML structure. The name of the argument variable is: "XMLARGS".

Arguments with an AV-production:
- Leeftijd (age), Comma separated list of ages (optional).
- Pictogram, Comma list of pictograms (optional).
- Title, string (optional).
- Regisseur (director), string (optional).
- Genre, identifier (optional).
- Productietype (production type), one or more arguments with each its own identifier (optional).
- Productiejaar (year of production), identifier (optional).
- NFC nummer (number), identifier (optional).
- Organisatiekenmerk, (Organization feature) one or more arguments with their own identifier (optional).
- Releasedatum van (release date, from), dd-mm-yyyy (optional).
- Releasedatum tot (release date, to), dd-mm-yyyy (optional).
- Arguments for a music video:
- Leeftijd (age), Comma separated list of ages (optional).
- Pictogram, Comma list of pictograms (optional).
- Title, string (optional).
- Artist, string (optional).
- Genre, identifier (optional).
- Productiejaar (year of production), identifier (optional).
- Organisatiekenmerk, (Organization feature) one or more arguments with their own identifier (optional).
- Releasedatum van (release date, from), dd-mm-yyyy (optional).
- Releasedatum tot (release date, to), dd-mm-yyyy (optional).

XML argument structure:
The variable XMLARGS contains a string, in XML format, with the following structure:

```
<args>
<leeftijd value=""/>
<pictogram value=""/>
<titel value=""/>
<regisseur value=""/>
<genre value=""/>
<productietype value=""/>
<productiejaar value=""/>
<nfc_nummer value=""/>
<organistiekenmerk value=""/>
<releasedatum_van value=""/>
<releasedatum_tot value=""/>
</args>
```

The string for clips is slightly different. "Regisseur" (director) needs to be changed to: "artiest" (artist)
Returned XML structure for AV productions:

```
<producties>
<productie>
<nummer></nummer>
<titel></titel>
<productietype></productietype>
<pictogrammen></pictogrammen>
<allpictogrammen></allpictogrammen>
<productiejaar></productiejaar>
```

```
<nfc_nummer></nfc_nummer>
<regisseur></regisseur>
<organisatie></organisatie>
</productie>
</producties>
```

Returned XML structure for AV productions clips:
```
<producties>
<productie>
<nummer></nummer>
<titel></titel>
<pictogrammen></pictogrammen>
<allpictogrammen></allpictogrammen>
<productiejaar></productiejaar>
<artiest></artiest>
<organisatie></organisatie>
</productie>
</producties>
```

Allpictogrammen contains a comma separated list of all classifications per category.

getChanged
This is an important function for those who like to keep their own productions up to date with our database and classifications. The getChanged function returns all productions that were changed within a specific date range. We advise to use this function in combination with the getRemoved function to keep your database synced with ours.
We do not advise you to use this application for a complete data dump, because of the maximum number of rows (1000). It is better to use this for frequent updates (daily/ weekly). Please note that the production number is the primary key to check whether a production is in your database. The getChanged explicitly contains not only new productions but also all changed productions (changed classifications, titles, etc.).
XML argument structure:
The variable XMLARGS contains a string, in XML format, with the following structure:
```
<args>
<changedatum_van value=""/>
<changedatum_tot value=""/>
</args>
```
Both values (changedate from/ changedate to) are required and need to be in the dd-mm-yyyy format.
Returned XML structure for AV productions:
```
<producties>
<productie>
<nummer></nummer>
<titel></titel>
<productietype></productietype>
<pictogrammen></pictogrammen>
<allpictogrammen></allpictogrammen>
<productiejaar></productiejaar>
<nfc_nummer></nfc_nummer>
<regisseur></regisseur>
<organisatie></organisatie>
</productie>
```

```
</producties>
```
Returned XML structure for AV productions clips:
```
<producties>
<productie>
<nummer></nummer>
<titel></titel>
<pictogrammen></pictogrammen>
<allpictogrammen></allpictogrammen>
<productiejaar></productiejaar>
<artiest></artiest>
<organisatie></organisatie>
</productie>
</producties>
```

getRemoved
This is an important function for those who like to keep their own productions up to date with our database and classifications. The getRemoved function returns all productions that were removed from our database within a specific date range. We advise to use this function in combination with the getChanged function to keep your database synced with ours.

We do not advise you to use this application for a complete data dump, because of the maximum number of rows (1000). It is better to use this for frequent updates (daily/ weekly).

XML argument structure:
The variable XMLARGS contains a string, in XML format, with the following structure:
```
<args>
<changedatum_van value=""/>
<changedatum_tot value=""/>
<nummer value=""/>
<titel value=""/>
</args>
```
The first two values (changedate from/ changedate to) are required and need to be in the dd-mm-yyyy format. Number and title are not required but could be used to look for a specific production.
Returned XML structure:
```
<producties>
<productie>
<nummer></nummer>
<titel></titel>
<datum_verwijderd></ datum_verwijderd>
</productie>
</producties>
```

3. Strategy

NICAM's strategy in adopting MIRACLE is to increase the reach and impact of our Kijkwijzer classification data. By adopting MIRACLE standards NICAM aims at increasing interoperability with third parties such as filterers, tv-guide applications and parental controls.

We want to change the way we share our data from the above mentioned API to a JSON approach to extend the range of its use/ adoption under mobile applications. However, this approach needs a backdrop to XML which will also be implemented. The MIRACLE data model allows to provide classification data in a simple XML structure, just like we already do for Kijkwijzer, as mentioned above. Both structures have similar data fields, such as the age level and content descriptors.

The strategy for implementation is directly linked to an update of our professionals (coders) website and API. Within our update we are taking the MIRACLE standard into account to be prepared for a future transition.

For testing purposes and because of the fact that we have a lot of existing users of the current API, the implementation will be executed in three stages.

Stage 1: Copy of a part of the Kijkwijzer data in MIRACLE format

The first stage is now being built. NICAM will disclose a small amount of ratings in the MIRACLE standard on a separate (hardware) platform. These ratings are for testing purposes only, consisting of old ratings that will be made publically available to be used for testing by current XML users and/or in Hackathons.

NICAM has asked current users of our XML data for their input on the proposed changes. It became clear that, as simple and well-structured as our data and the MIRACLE standard may be, companies are quite happy with now having successfully taken care of the issue of age labelling and seem to be rather reluctant towards changing their labels only because of an updated standard or syntax. Financial concerns on changes were raised. These concerns need to be observed in order not to jeopardize industry's uptake.

Stage 2: Adoption of MIRACLE format for all data alongside our XML/ JSON

Taking into account all concerns raised, we will enter the second stage by placing all our data in the MIRACLE format, and because of the concerns raised in stage 1, alongside the working copy of our new JSON/ XML. The plan is to synchronize this stage with the release of our new (professionals) website early 2015. Within this second stage the data will be available to registered users.

Stage 3: Transition to MIRACLE

When the first two stages are completed successfully, the third and final stage will ideally be a complete transition to the MIRACLE format. Depending on the outcome of previous stages we will make changes and keep our fall back option.

4. Moving forward

In order to put this idea into practice and since NICAM has no internal IT resources, we have discussed all the above mentioned stages with the contractor which is also realizing the Kijkwijzer age classification system. This contractor is well aware of the syntax and the technological requirements of our ratings. Consequently, we asked them to provide the appropriate API and implementation.

The complete Kijkwijzer dataset will only be made accessible to interested parties that register with NICAM after which we evaluate the possibility of future collaborations based on the way the data are used.

Throughout the MIRACLE project, NICAM will carefully assess the functionality and strive to improve the service, if necessary. NICAM will promote the service under the current data users.