



TV 2 REGIONS PLAY

Mobile App Requirements Document



Table of contents

Purpose of the document	4
The Purpose of the TV 2 Regions Play app	4
Company information	6
Project description	8
The Platform	9
Overall content description	10
Language	10
Basic content structure	11
Description of page types	12
Frontpage.....	12
Programs.....	13
Live TV	14
Live TV (24h channel).....	14
TV Schedule.....	14
Ad hoc-livestream	15
Favorites	15
List pages.....	16
Series pages	17
Program pages.....	17
News Broadcast pages.....	18
Snack clip pages	18
Settings	19
Navigation patterns	21
Search functionality	22
Video item	23
Video items in lists.....	23
Selected video item	23
The player	24
Video quality	25
Handling of video files	25
Share content	26
Geo-blocking	26

TV 2 Regions Play
Mobile App Requirements Document



Offline behavior..... 27

Chromecast/Airplay 27

Login..... 28

Banner references 28

Push notifications..... 29

Onboarding 30

Content Management..... 31

Description of user types 32

 Frontend users 32

 Anonymous users 32

 Users, logged in..... 32

 Backend users..... 32

 Editors 32

 Webmasters..... 32

 Admins..... 32

Design..... 32

Performance requirements..... 33

 Update frequency 33

 Load time 33

 Security 34

 Reliability..... 34

Analytics..... 34

Test and Adjustments..... 35

Deploy..... 35

Development process..... 36

Hosting and maintenance 36

Pricing 37

Deadline..... 37

Primary contacts for the TV 2 Regions 37



Purpose of the document

This document describes the need, the logic and the technical specifications behind the TV 2 Regions mobile Play app.

The main purpose of the document is to guide the development of the mobile app so that the vendors and the developer teams understand what is required to build the mobile Play app.

We kindly ask you to tell us if you are able to solve the different requirements and to describe how. You are welcome to let us know if you believe some of the requests are better handled in a different way.

Seven out of eight TV 2 Regions cooperate on a common digital platform that unifies the regions on the same digital setup. This common setup is the point of reference for this document and for the mobile Play app project.

The Purpose of the TV 2 Regions Play app

The overall purpose of the Play app is to make it easy for mobile users to stream and cast all the TV 2 Regions video productions including both VOD and livestreams.

Users must be able to view all relevant content published by the TV 2 Regions. The app must reach out to the traditional flow-TV viewers and by its simplicity and compelling UX encourage them to stay loyal to the regional brands and dedicate themselves to the streaming services we offer.

The Play app will most likely be one offer among other external streaming services. We expect this app to be the home base for the future TV 2 Regions streaming services and therefore it's important that it supports the individual TV 2 Regions brands and identity with a thrilling visual profile and a structure that makes it easy for the regions to expose their individual priorities.

The TV 2 Regions want the Play app and www-versions on regions websites (/tv) to reflect each other. Also, the Play app will be considered as the counterpart to the TV 2 Regions News app.

Today, the TV 2 Regions publish content on all platforms including TV, web and social media and the content is always closely linked to the production of videos and programs.

On web, we provide both news and programs. The front pages are mainly focused on news.

<https://www.tvmidtvest.dk>

<https://www.tveast.dk>

<https://www.tvsyd.dk>

<https://www.tv2lorry.dk>

<https://www.tv2ostjylland.dk>

<https://www.tv2fyn.dk>

<https://www.tv2nord.dk>

TV 2 Regions Play Mobile App Requirements Document



The news content is also published in news apps on iOS and Android. These news apps are dedicated to the news consumers and their needs. See the iOS version as example below.

TV MIDTVEST

<https://itunes.apple.com/dk/app/tv-midtvest/id921998573?l=da&mt=8>

TV ØST

<https://itunes.apple.com/dk/app/tv-%C3%B8st/id459717060?l=da&mt=8>

TV SYD

<https://itunes.apple.com/dk/app/tv-syd/id460978648?l=da&mt=8>

TV 2 Lorry

<https://itunes.apple.com/dk/developer/tv2-lorry/id450159301>

TV2 ØSTJYLLAND

<https://itunes.apple.com/dk/app/tv2oj/id456610116?l=da&mt=8>

TV 2/Fyn

<https://itunes.apple.com/dk/app/tv-2-fyn/id450454966?l=da&mt=8>

TV2 Nord

<https://itunes.apple.com/dk/app/tv2-nord/id451998445?l=da&mt=8>

Another section on the TV 2 Regions websites is focused on the series, programs, video clips and streaming in general.

<https://www.tvmidtvest.dk/mokka>

<https://www.tveast.dk/tv>

<https://www.tvsyd.dk/tv>

<https://www.tv2lorry.dk/tv>

<https://www.tv2ostjylland.dk/tv>

<https://www.tv2fyn.dk/tv>

<https://www.tv2nord.dk/tv>

The new mobile Play app is meant to give the users a compelling streaming experience of this content and strengthen the individual region's brands.

The mobile Play app is expected to give TV 2 Regions a basis for future streaming services.



Company information

The TV 2 Regions are eight Danish public regional media companies that supply the Danes with local news and programs related to the local community. As TV stations, we broadcast programs on our own 24h channel and in fixed windows on the commercial national TV 2 Denmark channel.

Today, news and programs are published on all platforms.

The TV 2 Regions cooperate on digital matters and therefore the mobile Play app project is considered as one project for one customer.

TV MIDTVEST and TV ØST are the points of origin for the project. The six other regions are options.

TV 2 Bornholm has its own technical setup. To take advantage of the option in this procurement, TV 2 Bornholm is expected to achieve the same technical setup as rest of the regions. The vendor is not expected to take any precautions for specific technical setups on TV 2 Bornholm.

TV/Midt-Vest
(CVR nr. 12505604)
Søvej 2
7500 Holstebro

("TV MIDTVEST")

TV2/Øst
(CVR nr. 13420947)
Kildemarksvej 7
4760 Vordingborg

("TV ØST")

OPTIONS:

TV/Syd
(CVR nr. 10047692)
Media Park 1
6000 Kolding

("TV SYD")

TV 2 Regions Play
Mobile App Requirements Document



TV2/Lorry S/I
(CVR nr. 13270198)
Allegade 7 – 9
2000 Frederiksberg

("TV 2 Lorry")

TV2/Østjylland
(CVR nr. 12383703)
Skejbyparken 1
8200 Aarhus N

("TV2 ØSTJYLLAND")

TV2/Fyn
(CVR nr. 12249438)
Olfert Fischers Vej 31
5220 Odense SØ

("TV 2/Fyn")

TV2/Nord
(CVR nr. 12230281)
Søparken 4
9440 Aabybro

("TV2 Nord")

TV 2 Bornholm
(CVR nr. 12686382)
Brovangen 1
3720 Aakirkeby

("TV 2 Bornholm")



Project description

Point of origin is the building of one mobile TV app for two regional TV stations - TV MIDTVEST and TV ØST. In addition, the offer must reflect how the app design and the content of the front page can be modified to other regions.

Six other regions are included in the project as options. These are TV 2 Lorry, TV2 ØSTJYLLAND, TV SYD, TV 2/Fyn, TV2 Nord and TV 2 Bornholm.

The functionality of the solution must be the same regardless of the number of regions that participate from the beginning. The offer must account for the scale of pricing for participation of 1 - 8 regions.

We consider the mobile Play app as one app no matter how many regions that participate.

Every region will have its own Play app published for iOS and Android. The frontpage in the app must be focusing on the home region's productions but content from all the other regions is offered in the app as a backlist.

The basic structure and the functionality will be the same in all versions of the app but the front page and the live-TV page contains elements that are editable for each region and therefore might appear different from region to region. In addition, it is a requirement that the app can be skinned to reflect the region's identity and brand.

The solution must be compatible with our video platform, Kaltura, but it should be possible without significant reprogramming to switch to other video platforms, should the TV 2 regions do that in the future. Depending on the suggested content management solution, the app must also be compatible with the TV 2 Regions CMS made in Drupal.

The project contains all steps in the development of the app including test and design.

Also, the vendor's solution must contain a plan for hosting and maintenance.

This document describes all the matters that must be taking into account but we don't require specific technical solutions. We will listen to any suggestions to achieve an even better streaming app within the scope.

The requirements must help to match the expectations and serve as a great fundament for an agile process.

Requests are marked with priority 1 – 3. Priority 1 is highest priority. We will attach importance to the solution that offers the most compelling user and streaming experience to the best price.



The Platform

Request	Priority	Compliance Yes/No/Partly	Description of solution
The regional Play app must be built for iOS and Android fit for use on both mobile and tablet.	1		
The app must support iOS v. 9.3.5 and Android v. 4.4.2 and all versions released after that.	1		
The app must be based on the Kaltura API with the option to change to a different media provider at a later state.	1		
The app must be able to read a XLM-feed with EPG information from WhatsOn.	1		
The app must be able to handle four different types of video: <ul style="list-style-type: none"> • Livestreams • Series (divided into Series and one-off programs) • News broadcasts (sometimes including subclip) • Snack-size clips 	1		

There are no specific requirements concerning the framework.



Overall content description

Request	Priority	Compliance Yes/No/Partly	Description of solution
<p>The TV 2 Regions Play app must basically contain all the TV 2 Regions video productions and additional content to promote these. This includes:</p> <ul style="list-style-type: none"> • VOD (TV Shows, one-off programs, news Broadcasts and video clips) • Live-TV (24h channels (one per TV 2 Region)) • Livestreams (ad hoc) • TV Schedule • Banner slide • Breaking banner for ad hoc livestreams from own region • References to other TV 2 Regions apps (Advertisement banners) 	1		

Language

Request	Priority	Compliance Yes/No/Partly	Description of solution
The language in the app must be in Danish for all users.	1		



Basic content structure

Request	Priority	Compliance Yes/No/Partly	Description of solution
<p>Main menu includes in prioritized order:</p> <ul style="list-style-type: none"> • Frontpage (serves as discover page) • Programs (serves as archive and search page) • Live TV (incl. TV Schedule) • Favorites (offers personalization) <p>These four pages make up the main structure of the app. In addition, the Play app contains these pages.</p> <ul style="list-style-type: none"> • List pages (standard page for presentation of various kinds of topics) • Series pages (standard page for presentation of Series) • Programs pages (standard page for presentation of Programs) • News Broadcasts pages (standard page for presentation of News Broadcasts) • Snack clip pages (standard page for presentation of Snack-size clips) • Settings (symbolized with user icon) <ul style="list-style-type: none"> ○ Signup ○ Login ○ Push messages ○ Select and set order on TV 2 Regions ○ Video quality ○ Clear history ○ Privacy policy ○ About 	1		



Description of page types

Front page

The frontpage provides the overview of the most relevant content in the app. It serves as a page where the user can discover all kinds of content.

Request	Priority	Compliance Yes/No/Partly	Description of solution
The frontpage is editable in the meaning that the editor is able to add/remove, rename and change the order of the different lists/elements.	1		
The frontpage contains: <ul style="list-style-type: none"> • Lists with selected Series, Programs, News Broadcasts and video clips. * Editor can order lists by video type and/or categories (preselected keywords for all TV 2 Regions like Sport, Nature, Food, etc.) and/or TAG's from home region and/or publish date. The list is ordered on the list page.	2		
• List with most viewed programs from own region within the latest 3 weeks. * List can be filtered by video type(s).	2		
• List with revivals from own region * List is edited manually by editor.	3		
• List with programs from other regions * (All programs have a label showing which region has produced the program. Not only in this list but in general)	2		
• Breaking banner for ad hoc livestreams from own region * The editor can insert a breaking banner for livestreams to promote a special event (placed on the Live TV page)	2		
• Banner slide (promo) * The editor can insert a banner slide on the page to promote specific programs.	2		



Mobile App Requirements Document

The items are optional and the order of the items on the front page will depend on the editor's priorities.	2		
All lists show up to 10 items on the frontpage. If a list contains more than 10 items, user gets the opportunity to on a "See more"-link.	2		

Programs

The Programs page provides an overview of all content in the app and serves as an archive and search page.

Request	Priority	Compliance Yes/No/Partly	Description of solution
It's focused on the home region but the page includes the backlist from all the other regions.	1		
By default, the user sees the home region's content and the list on the page appears by default with all the home regions productions in alphabetical order.	1		

There are a number of filters on the page that gives the user the opportunity to find specific content.

The user has the following tools to find specific content:

Request	Priority	Compliance Yes/No/Partly	Description of solution
1. Search field (see further description under "Search functionality")	1		
2. Show content from: Home region or All regions	1		
3. Show video types: All content or Series (overall Series titles) or Programs (one-off's) or News Broadcasts (including subclips) or Video clips (including subclips).	2		
4. Show topics: (preselected categories for all TV 2 Regions like Sport, Nature, Food, etc. and TAG's from home region (added by the editor))	2		

Mobile App Requirements Document



5. Select date: (production publish within a specific timeframe – by publish date)	2		
6. Order content in the list with selected content: Alphabetically or Latest or Most viewed (after publish date).	3		
7. If All content is selected, the list on the page will be divided into the following types in prioritized order. a) Programs (on-off's) b) Series (overall Series titles not episodes) c) News Broadcasts (including subclips) d) Snack clips	2		
The tools on the Program page must be packed in a compelling UX that makes it easy for the users to find the requested content.	1		

Live TV

The Live TV page shows live TV from the home region and all the TV 2 Regions accompanied by a TV schedule below.

Request	Priority	Compliance Yes/No/Partly	Description of solution
Live TV (24h channels) By default, the home region's live player is shown on the top of the page.	1		
Right beneath the player, the user can select Live TV from other TV 2 Regions in a bar below the home region's live player.	2		
TV Schedule The TV schedule appears below the live player and the regions bar.	2		
The TV schedule follows the live player and contains items for the selected region the rest of the day.	1		
TV Schedule The TV schedule appears below the live player and the regions bar.	3		
Every region's TV Schedule contains descriptions of programs	2		



Mobile App Requirements Document

seven days ahead and two days back.			
On top of TV Schedule there is a filter where can select other days than today.	2		
Items in the schedule contain: <ul style="list-style-type: none"> - Publish date - Title on aired program - Thumbnail if available - Long description - Produced by - Production year 	2		
Only publish date and title is exposed. The rest of the meta data must be unfolded by the user.	3		
If an item refers to a VOD element that already exist, the user is offered the opportunity to click on play and activate the program.	2		
Ad hoc livestream The editor must be able to insert an ad hoc livestream above all the other content on page to promote a special event.	1		
The livestream appears as a breaking banner.	2		
When user clicks on the banner the ad hoc livestream starts playing in player on the top of the page.	1		
The user can return to Live TV (24h channel) by selecting the region in the regions bar.	2		

Favorites

The Favorites page is symbolized with a heart and contains two lists of videos.

Request	Priority	Compliance Yes/No/Partly	Description of solution
The Favorites page contains a list of "The 9 latest played videos"	2		
If video is not viewed to the end, user gets a message with the question: "Are you ready to continue?"	2		
User must be able to clear history in Settings > Clear history.	1		
The Favorites page contains a list of Favorites. It is videos marked by the user as a favorite.	1		



Mobile App Requirements Document

Favorites disappear from the list when the user deselect the video as Favorite. User deselect by clicking on the enhanced heart. Before the video disappears from, the user is asked to confirm the action.	2		
If the Favorites list is empty, the user will see info about how to add the first Favorite.	3		

List pages

The list pages are standard lists that contains different kinds of topics – e.g. Nature, Culture, Most viewed, latest, etc.

Request	Priority	Compliance Yes/No/Partly	Description of solution
A standard list usually appears if the user clicks on a “See more”-link from an enhanced list on the frontpage.	2		
We don't require all list pages to be available in the menu. This will depend on the vendor's solution.	3		
Editor can order the list by video type and/or categories (preselected keywords for all regions like Sport, Nature, Food, etc.) and/or TAG's and/or publish date. The selected order follows the list when it's enhanced on the frontpage.	2		
The list contains content from the regions selected by the user in Settings > Select and set order on TV 2 Regions.	1		
All lists show by default 20 items. In case of more items there is a pager, where user can load another 10 items at the time.	2		

TV 2 Regions Play
Mobile App Requirements Document



Series pages

A Series page appears when the user clicks on a Serie-item in a list.

Request	Priority	Compliance Yes/No/Partly	Description of solution
The Series page contains all episodes of the selected show. The latest episode is enhanced in a player on top of the page.	2		
All episodes are shown by season below. It must be easy for the user to navigate between the different seasons.	2		
When user clicks on another episode, it starts playing.	1		
Provider must suggest a solution that makes it possible to add a list like "You might also like" or "More of [category/TAG]" in the bottom of the page.	2		

Program pages

A Program page appears when the user clicks on a Program-item in a list.

Request	Priority	Compliance Yes/No/Partly	Description of solution
The Program page contains the selected program enhanced in a player on top of the page.	1		
Below the program there is a list called: "You might also like"	1		
Provider must suggest a solution that makes it possible to add a list like "You might also like" or "More of [category/TAG]" in the bottom of the page.	1		

TV 2 Regions Play
Mobile App Requirements Document



News Broadcast pages

A News Broadcast page appears when the user clicks on a News Broadcast-item in a list.

Request	Priority	Compliance Yes/No/Partly	Description of solution
On the News Broadcast page, the latest news broadcast is enhanced in a player on top of the page.	1		
All the subclips from the selected news broadcast are shown below the player.	1		
In the bottom of the page there are lists with the latest news broadcast.	2		

Snack clip pages

A Snack clip page appears when the user clicks on a Snack clip-item in a list.

Request	Priority	Compliance Yes/No/Partly	Description of solution
The Snack clip page contains selected program enhanced in a player on top of the page.	3		
Below the Snack clip there is a list called: "You might also like"	3		
If a TV 2 Region doesn't produce content in the Snack clip format, the list simply doesn't appear in the app.	3		
Provider must suggest a solution that makes it possible to add a list like "You might also like" or "More of [category/TAG]" in the bottom of the page.	3		

TV 2 Regions Play
Mobile App Requirements Document



Settings

Settings is a menu of basic pages that offers the user the possibility to control and personalize the app.

Request	Priority	Compliance Yes/No/Partly	Description of solution
Above the menu list the user can see his/her username if user is logged in. If not, the user status is "Not logged in" with the option to log in.	1		
Text above the menu list: "You are logged in as xx" or "Login and get access to your favorites and "Continue playing". It's easy and free."	2		
Buttons above the menu list: Signup -button (If not logged in) Login -button (If not logged in) Log out -button (If logged in)	2		

The menu contains:

Request	Priority	Compliance Yes/No/Partly	Description of solution
<ul style="list-style-type: none"> • Signup <ul style="list-style-type: none"> ○ Text fields for first name and surname, email address and password. ○ If the user signs up by email, the user is told to confirm the email address. ○ Signup with Google ○ Signup with Facebook 	1		
<ul style="list-style-type: none"> • Login <ul style="list-style-type: none"> ○ Text field for username ○ Text field for password ○ "Forgot password?" (click unfolds text field for email address) ○ Login with Google ○ Login with Facebook 	1		
<ul style="list-style-type: none"> • Personal profile <ul style="list-style-type: none"> ○ Change personal information ○ Delete account 	1		
<ul style="list-style-type: none"> • Push messages 	2		



Mobile App Requirements Document

<ul style="list-style-type: none"> ○ List of categories where we offer push notifications. Next to each keyword there is an on/off toggle button (or similar) where the user can turn notifications on and off. 			
<ul style="list-style-type: none"> ● Select and set order on TV 2 Regions <ul style="list-style-type: none"> ○ Home regions name in top ○ List of the seven other TV 2 Regions. Next to each region there is an on/off toggle button (or similar). Also, the user can change the order of the regions with drag and drop. 	2		
<ul style="list-style-type: none"> ● Video quality <ul style="list-style-type: none"> ○ By default, set to “Automatically”. User can change this to lowest, medium or highest quality. 	2		
<ul style="list-style-type: none"> ● Privacy policy <ul style="list-style-type: none"> ○ Text info about cookies and how we store user data. 	1		
<ul style="list-style-type: none"> ● About <ul style="list-style-type: none"> ○ Text info about the Play app + contact info 	1		
Version number x.x.x is shown in the bottom of the settings page below the menu.	1		



Navigation patterns

Main menu includes in prioritized order:

- **Frontpage** (serves as discover page)
- **Programs** (serves as archive)
- **Live TV** (incl. TV Schedule)
- **Favorites** (offers personalization)

These four pages make up the main structure of the app.

Request	Priority	Compliance Yes/No/Partly	Description of solution
One click on a menu point leads users to the page they select. The user will be lead to the top of the page if it's the first time during the visit that user is clicking on the menu point. If user already has been on the page during the visit he will be lead to the spot on the page he left.	1		
The solution must consider how user gets around when he is clicking on the different content on these pages. <ul style="list-style-type: none"> • How does the user get back to the Frontpage? • How does the user get back to where he came from? What happens when/if a user crosses a content path?	1		
Double click on a menu point always leads users to the top of the page.	2		
Top bar contains logo, Chromecast icon and user icon (leads to settings).	1		



Search functionality

Request	Priority	Compliance Yes/No/Partly	Description of solution
The TV 2 Regions Play app must contain a search functionality that gives the users an opportunity to search for titles.	1		
The search functionality is placed on the Programs page and takes content from all regions into account. The user must be able to set different filters like dates to limit the amount of search results.	1		
The search functionality is limited to titles.	3		
The text "Search for a title" is shown in search field.	2		
When a user is searching for a title, the search must mirror the letters in the search field. The number of search results must be decreased as the user types more letters. The autocomplete functionality is expected to work like this. Examples: <ul style="list-style-type: none"> - If user types "D" he will only see all titles that contains "D". - If user types "De" he will only see all titles that contains "De" like "De Uønskede" and "Den Danske Klosterrute", etc. - If user types "De u" he will only see all titles that contains "De u" like "De Uønskede". - If user types "ønsk" he will only see all title the contains "ønsk" like "De Uønskede". 	1		
User must be able to search both in the regions own content and in all the regions content.	2		



Mobile App Requirements Document

The search results must be divided in the diverse types of videos in the following order: <ul style="list-style-type: none"> • Series • Programs • News Broadcast and subclips • Snack clips 	2		
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The described logic concerning autocomplete is known from smart TV apps like Netflix, iTunes and Viasat.

Video items

Request	Priority	Compliance Yes/No/Partly	Description of solution
<p>Each video item comes with some of the following metadata:</p> <ul style="list-style-type: none"> • Show/Program title • Episode's title • Thumbnail • Duration • Publish date (online release) • Episode number (on Series) • Season (on Series) • Airdate (broadcast release – on News Broadcasts) • Short/Long description • Categories (preselected keywords that counts for all TV 2 Regions) • TAG's (from home region) • Video type • Published by • Produced by (if not produced by publisher) • Production year • Sharable yes/no • Geo-blocking yes/no 	1		
<p>Video items in lists</p> <p>Video items in lists are structured by title (alphabetically), airdate (latest first), TAG's (lists with specific topics/keywords), and Video type (Series, one-off Programs, News Broadcasts). These metadata are exposed in lists:</p> <ul style="list-style-type: none"> • Show/Program title 	2		

Mobile App Requirements Document



<ul style="list-style-type: none"> • Episode's title • Thumbnail • Duration • Episode number (on Series) • Season (on Series) • Airdate (broadcast release - on News Broadcasts) 			
<p>Selected video item</p> <p>These metadata are exposed on a selected video item:</p> <ul style="list-style-type: none"> • Show/Program title • Episode's title • Thumbnail • Duration • Episode number (on Series) • Season (on Series) • Airdate (broadcast release – on News Broadcasts) • Short/Long description • Categories (preselected keywords that counts for all TV 2 Regions) • TAG's (from home region) • Published by • Produced by (if not produced by publisher) • Production year • Sharable yes/no <p>Some of the metadata may be packed but give the user the option to see further description of the selected video item.</p>	2		
<p>Below a selected video item there are related videos. This can be other episodes from the same show, other season, sublips (usually for News Broadcasts) or a list with "You might also be interested in".</p>	2		
<p>Logged in users must be able to mark a video as a "Favorite". This includes videos in the lists and on selected video items.</p>	1		
<p>User must be able to share selected video items.</p>	2		



The player

The player could be a skinned version of the advanced native player.

Request	Priority	Compliance Yes/No/Partly	Description of solution
The player must be tailored to the user's behavior on both mobile and tablet.	1		
We expect the player to contain these navigation options: <ul style="list-style-type: none"> • Show/Program title (if full screen) • Episode's title (if full screen) • Episode number (if full screen) • Thumbnail • Play/Pause • Timeline including time spent and total duration • Go 30 seconds back (or similar service) • Full screen/back from full screen • Airplay (on iOS) • Sticky player (on tablet) 	2		

Version 1.0.0 of the mobile Play app is not expected to take any autoplay solution into account.

Video quality

The video quality is by default set to "Automatically".

Request	Priority	Compliance Yes/No/Partly	Description of solution
The user can change this in Settings > Video quality.	2		
The user can and select "Automatically", "Lowest", "Medium" or "Highest" quality.	2		

Right now, the TV 2 Regions deliver the videos in these qualities:

- Low: 850KB
- Medium: 2300KB
- High: 4MB



Handling of video files

The TV 2 Regions often broadcast the same Series and Programs. This means that the shows theoretically could appear several times in the app.

Request	Priority	Compliance Yes/No/Partly	Description of solution
The solution must describe how to handle this best so that videos don't appear as duplicates in the lists and in the search results.	2		

Share content

Request	Priority	Compliance Yes/No/Partly	Description of solution
The users must be able to share content from the app on a variety of social media platforms, including Facebook, Twitter, Snapchat and other. And in addition, hereto send links to content via own email account.	1		

The solution can be based on native functionality.

Geo-blocking

Request	Priority	Compliance Yes/No/Partly	Description of solution
The videos contain geo-blocking that must be reflected in the app.	1		
Geo-blocked content must not be shown in the app.	1		



Offline behavior

Version 1.0.0 is not expected to offer download of videos for offline use but it must be possible to add it to the solution later.

Request	Priority	Compliance Yes/No/Partly	Description of solution
In case of lost connection, the user must be notified that the connection is lost.	2		

Chromecast/Airplay

Request	Priority	Compliance Yes/No/Partly	Description of solution
The solution must account for a compelling Chromecast/Airplay experience.	1		
Chromecast navigation on the mobile device must include: <ul style="list-style-type: none"> • Show/Program title • Episode's title • Episode number • Thumbnail • Play/Pause • Scroll on timeline including time spent and total duration • Sound adjustment • Go 30 seconds back (or similar service) • Start from beginning / Continue playing 	1		
Chromecast navigation on the TV screen must include: <ul style="list-style-type: none"> • Show/Program title • Episode's title • Episode number • Thumbnail • Play/Pause • Scroll on timeline including time spent and total duration 	2		
The player on the selected video on the mobile device must be	1		



Mobile App Requirements Document

inactive when it's casted to the TV screen.			
The Chromecast must be able to re-establish the Chromecast navigation if user returns to the app after seeing other apps on the mobile device.	1		
The Chromecast solution must be able to reconnect in case of lost connection.	1		
When the Chromecast connects with the TV, there is a splash on the TV-screen until the program is loaded and starts playing.	2		

Login

The TV 2 Regions Play app must give the users the opportunity to login and benefit from extra personalization.

The login is placed on the Settings page.

Request	Priority	Compliance Yes/No/Partly	Description of solution
We will attach importance to the solution that offers a login that can be used across all TV 2 Regions platforms. This could e.g. be an LDAP-server setup for all the TV 2 Regions so that the users are able to use the same login not only in the mobile Play app but also in the news app and on the websites.	3		
The user must be able to login with e-mail.	1		
If the user signs up by email, the user is told to confirm the email address.	1		
We prefer a solution that also offers an easy login with Google and/or Facebook.	2		
The solution must contain a unique ID for each user that signs up so that users are able to change name and email address effortlessly.	1		



Mobile App Requirements Document

The solution requires user accept of the use of data according to the new Personal Data Regulation from EU.	1		
When user is logged in The app must remember the user settings across different devices. This includes: <ul style="list-style-type: none"> • Favorites • Subscription to push notifications • Latest three viewed videos • Continue playing 	2		

Banner references

Request	Priority	Compliance Yes/No/Partly	Description of solution
The TV 2 Regions Play app must contain banners for the region's news app and for the other regions play apps in connection to the relevant videos. These references appear as advertisements.	1		

Push notifications

Request	Priority	Compliance Yes/No/Partly	Description of solution
Users must be able to apply for push notifications and get an alert when there is are new episodes or programs from Series or topic that the user follows.	2		
There are two kinds of push notifications. 1) Automatically generated push messages This push notification contains:	2		



Mobile App Requirements Document

<ul style="list-style-type: none"> • Prefix (E.g. There is a new episode ready for you) • Show/Program title • Episode's title <p>This service is automatically pushed to the users that have applied for it.</p>			
<p>2) Manually handled push messages</p> <p>This push notification contains:</p> <ul style="list-style-type: none"> • Text (Mandatory) (E.g. We have a new show for you coming up. Watch first episode here) • Show/Program title (optional) • Episode's title (optional) • Link to video (optional) <p>This push message is handheld by the editor.</p>	2		

Onboarding

During the onboarding, the user will be offered the opportunity to:

Request	Priority	Compliance Yes/No/Partly	Description of solution
<p>1) Select and order all the other regions in the app</p> <p>This setting will influence the list with content from other regions and the order of the regions on the Live TV page. The home region cannot be changed and will always be the primary region in the app.</p>	1		
<p>2) Signup</p> <p>This gives the user a change to signup immediately and take advantage of the extra functionality.</p>	1		



Mobile App Requirements Document

Setup can be changed later under settings	1		
If relevant, additional onboarding can be placed directly next to the functionalities that requires explanation to give the best user experience.	3		

Content Management

Request	Priority	Compliance Yes/No/Partly	Description of solution
The solution must give the TV 2 Regions editors the option to manage lists and banners in the app.	1		
This includes the possibility to: <ul style="list-style-type: none"> • add/remove videos in the app • add/remove additional livestream • add/remove/edit lists in the app • add/remove/edit banner slide • change the order on the lists and the other subjects on the front page • Activate/Deactivate push notification service for Series/Programs/News Broadcasts and categories/TAG's • Insert Ad hoc-livestream on the top of the Live TV page 	1		
The content management system can be an independent solution but the vendor can also suggest a solution where the content management system is integrated as a part of the TV 2 Regions existing CMS-platform in Drupal. In both cases, the vendor must account for the solution.	2		



Description of user types

- **Frontend users**
 - **Anonymous users**
 - They are able to see and use all content in the app.
 - They can't save settings for other devices because this requires login.
 - **Users, logged in**
 - They are able to see and use all content in the app.
 - They can save settings that will be recognized on other devices where the same user is logging in. These functionalities are saved with the user login.
 - Favorites
 - Subscription to push notifications
 - Latest three viewed videos
 - Continue playing

- **Backend users**
 - **Editors**
 - can add/remove videos in the app
 - can add/remove additional livestream
 - can add/remove/edit lists in the app
 - can add/remove/edit banner slide
 - can change the order on the lists and the other subjects on the front page
 - **Webmasters**
 - same access as editors
 - can access and change presentation in iTunes/Google Play
 - **Admins** (external developers)
 - can make fundamentally changes to the app and deploy new versions.

Design

The design is the same for all participating TV 2 Regions except for individual logos and individual basic colors to enhance the region's identity.

The TV 2 Region will provide all relevant logos and color codes. Logos are available here: <https://www.tv2lorry.dk/tv2regioner>

Request	Priority	Compliance Yes/No/Partly	Description of solution
The solution must come with a design that underpins the screen sizes from 4" to 12,9".	1		
We expect the solution to be designed for both mobile and tablet. Ideally, there is a thrilling user experience in portrait- as well as landscape mode.	2		



Mobile App Requirements Document

When it comes to use of icons, we prefer a similarity to the TV 2 Regions news apps to make it easy for our users to switch between the apps. As example “Favorites” should be symbolized with a heart.	2		
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Performance requirements

The solution must account for the performance of the app. This includes:

Update frequency

Request	Priority	Compliance Yes/No/Partly	Description of solution
Changes in video files and their metadata must be reflected in the app within 120 seconds.	1		
Changes in the TV Schedule must be reflected in the app within 15 minutes.	1		
If a video is deleted after the playlist is loaded by the user, the user will be notified on the screen that this content is no longer available.	2		

Load time

Request	Priority	Compliance Yes/No/Partly	Description of solution
The mobile Play app is expected to load within 5 seconds.	2		
A splash animation helps to decrease the experience of the launch time.	1		
The solution must account for how the loading functionality ensures a fast user experience.	1		

TV 2 Regions Play
Mobile App Requirements Document



Security

Request	Priority	Compliance Yes/No/Partly	Description of solution
User data must be kept safe and comply with EU Personal Data Regulation.	1		

Reliability

Request	Priority	Compliance Yes/No/Partly	Description of solution
The solution must account for the reliability.	1		
We expect an average of no more than 3 crashes per week in total for all users in all TV 2 Regions apps.	1		
The expected uptime is 99,95% per year.	1		

Analytics

Request	Priority	Compliance Yes/No/Partly	Description of solution
<p>We expect the following statistics to be included in the solution.</p> <ul style="list-style-type: none"> • Users • Visits • Time spent per visit • Screen views • Actions per video (play, pause, stop) • Time consumed per video - 0, 25, 50, 75 percent • Actions per category and TAG (play, pause, stop) • Number of push messages that reaches active users <p>Number of push messages that users click on</p>	1		
The TV 2 Regions use Google Analytics and Chartbeat on existing platforms. We prefer to keep statistics gathered with the existing stats in Google Analytics but it's not definitive.	2		



Test and Adjustments

Request	Priority	Compliance Yes/No/Partly	Description of solution
The solution must include a short testing period where real users can give feedback on the first test version.	1		
Depending on the feedback, we expect an open and constructive dialogue with the vendor on how to adjust and improve the solution to make sure that the app is released with a compelling user experience.	1		

Deploy

Request	Priority	Compliance Yes/No/Partly	Description of solution
The solution must include deploy to AppStore and Google Play.	1		

The TV 2 Regions are responsible for the presentation of the app.



Development process

The TV 2 Regions prefer an agile process based on the match of expectations made with this document. Please describe how you will handle the development process.

Description of solution Priority 1
(Description)

Hosting and maintenance

Please describe how the solution is hosted and how you will handle the ongoing maintenance after deploying.

Description of hosting and maintenance. Priority 1
(Description)



Pricing

The solution must include pricing for:

Request	Priority	Compliance Yes/No/Partly	Description of solution
Development (the entire process from scope, UX, design, testing, coding and deploy)	1		
Hosting and maintenance	1		
Push functionality	1		
Visibility about other potential expenses in connection to the running of the app.	1		
The offer must be scaled from 2 to 8 participating regions taken into account that seven regions are optional in the solution.	1		

Deadline

Request	Priority	Compliance Yes/No/Partly	Description of solution
The mobile play app must be ready for deploy for all participating TV 2 Regions as soon as possible – preferable no later than the end of February 2018.	2		

Primary contact for the TV 2 Regions

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