# Responsive Design

- Build a website for a mobile phone.
- Serve every user that site.
- Adapt the design, content, and features to a device's properties with progressive enhancement.



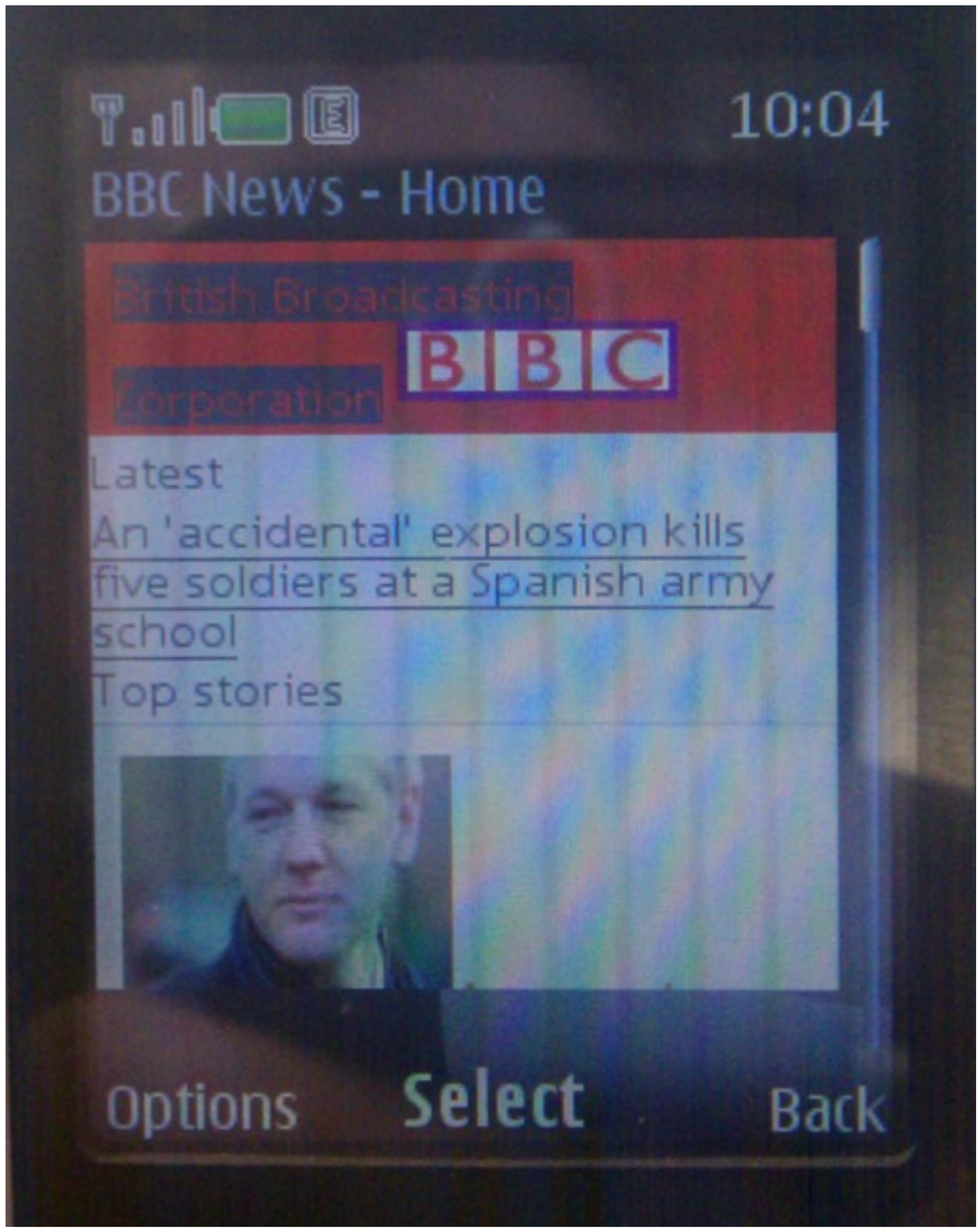
- cf. alistapart.com/articles/responsive-web-design/
- Alternative to device detection (i.e. doesn't need DEMI)

http://bit.ly/bbcnews8



- Prototype - as live with 60 second delay (missing galleries, video)
- Load it on to your device. Some bugs. ~2 days effort.
- Mostly managed with CSS media queries & a little bit of JS.

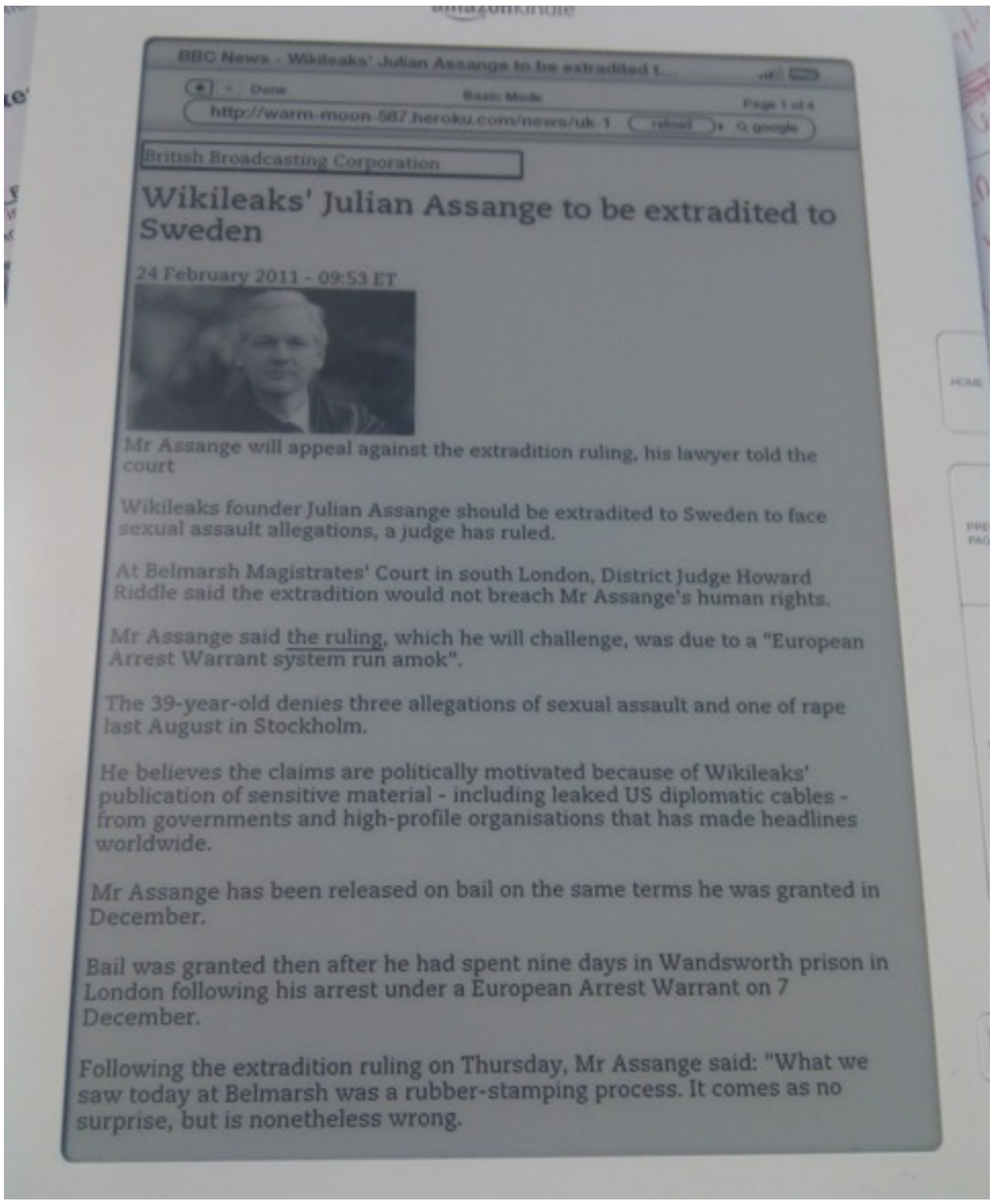
# Feature Phone






- Low end devices. Minimal experience.
- Looks rough around edges.

# Kindle

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- Kindle. Big screen, slow hardware, no javascript.
- Users really just want something to read.

# Smart phone

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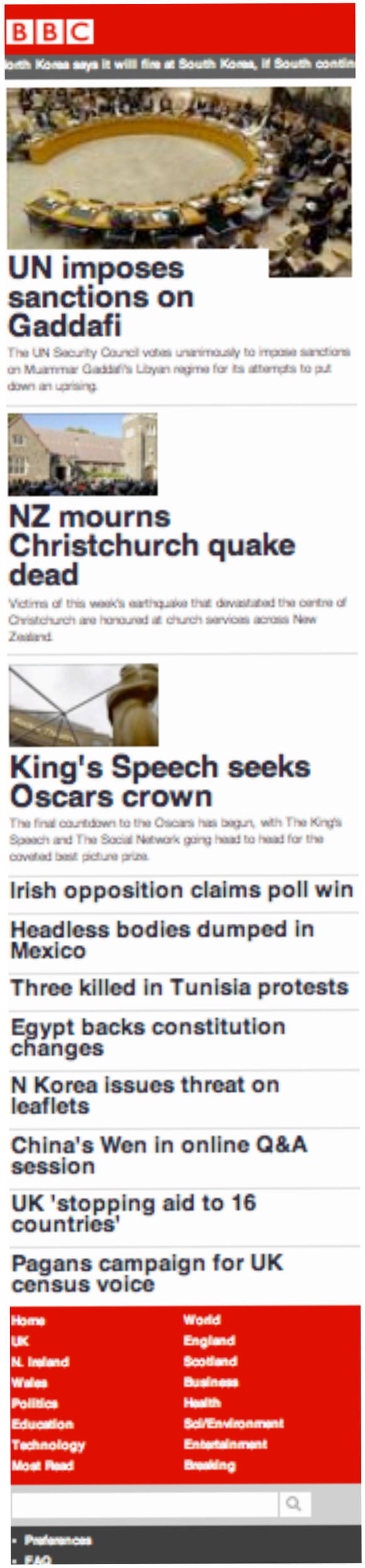
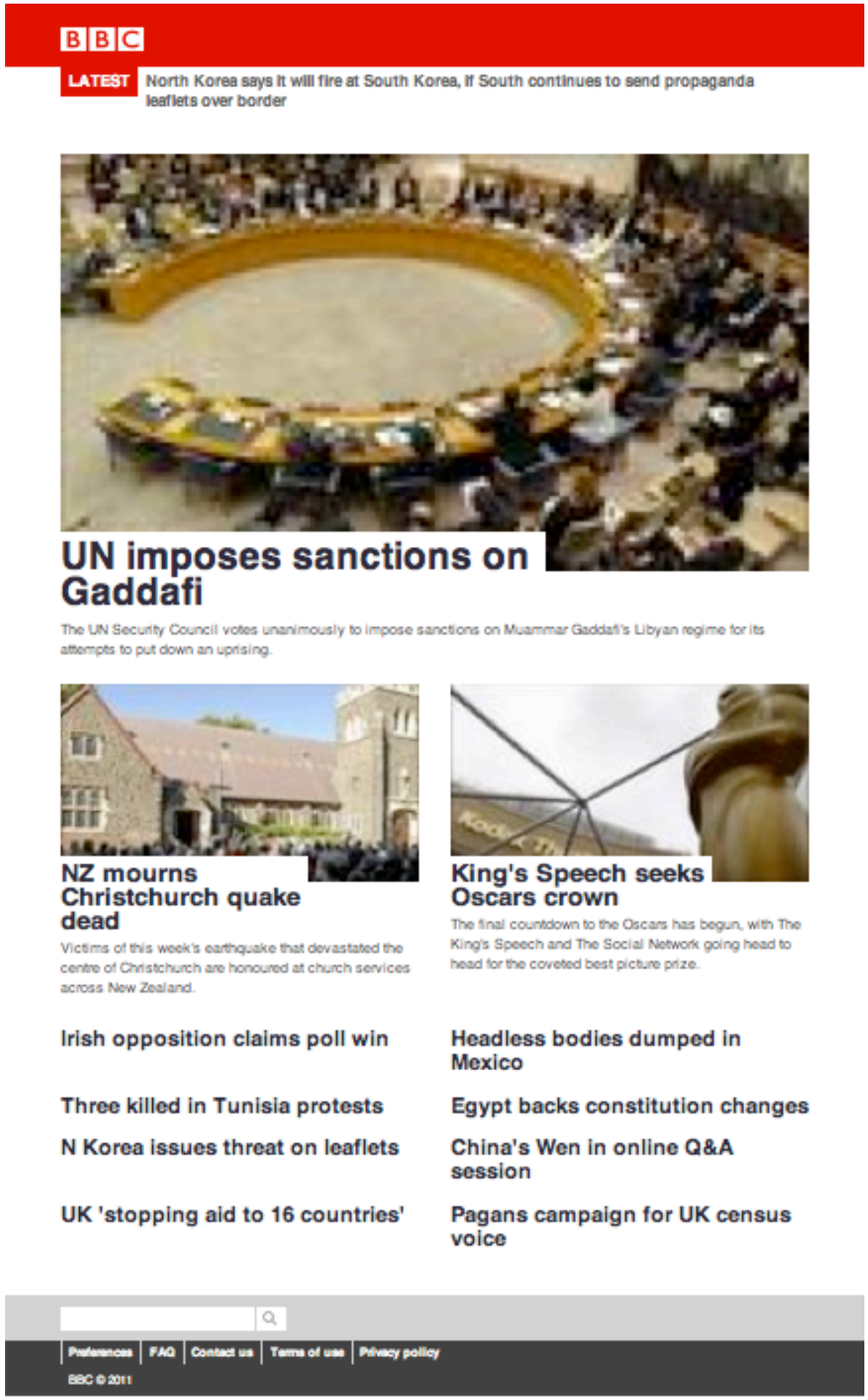
- Average smart-phone.
- Long and thin, Nice to scroll down. Big links to **touch**, CSS3 Ticker.
- Not unlike current mobile site.
- Fluid, linearized design – GEL is pretty suited to this.



# Tablet (portrait)

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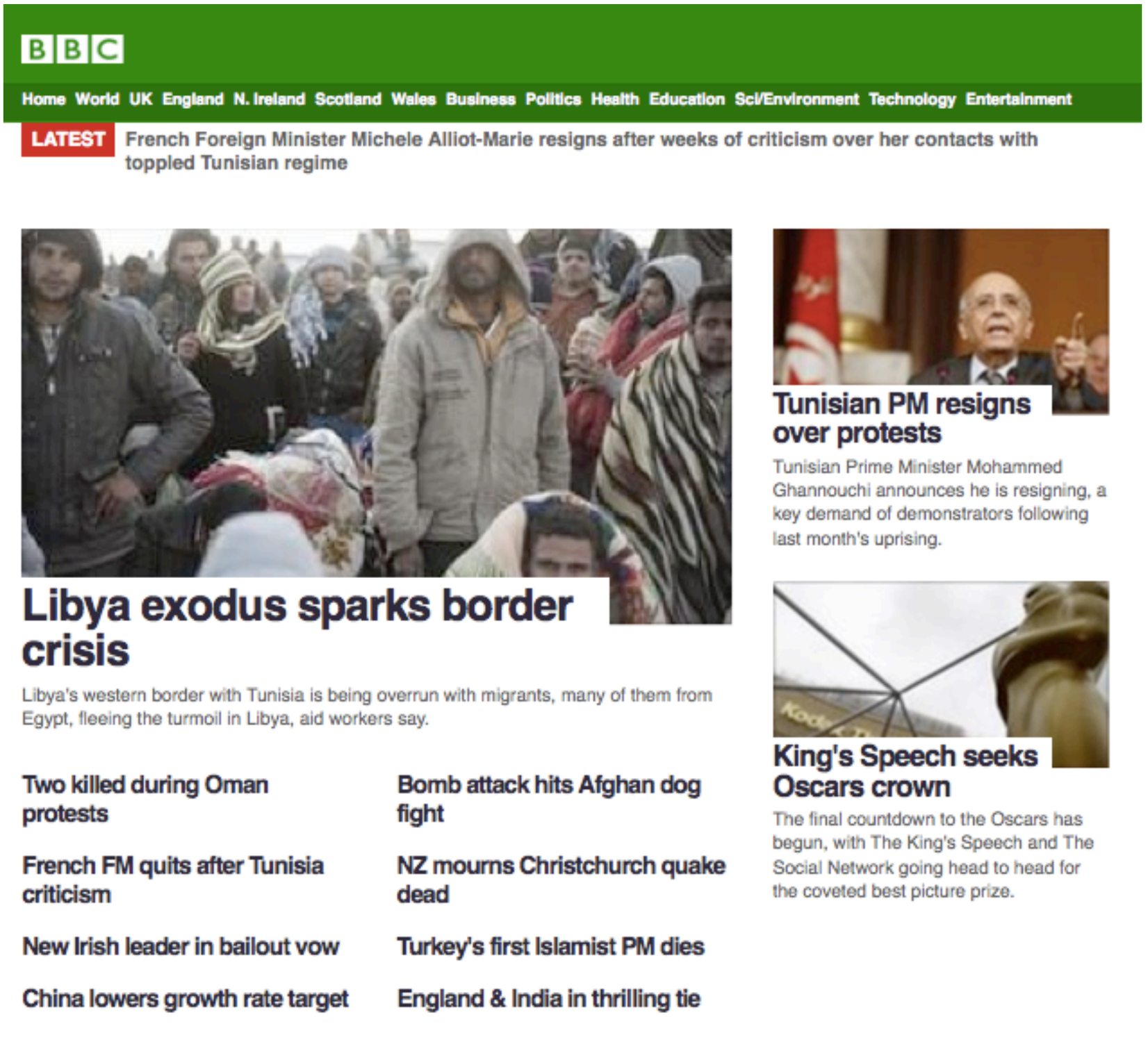
- Tablet in portrait.
- One main story, two columns for 2nd & 3rd. Bigger images (for fingers, not mouse).
- More room for LATEST carousel at top.

# Tablet (landscape) & Netbook

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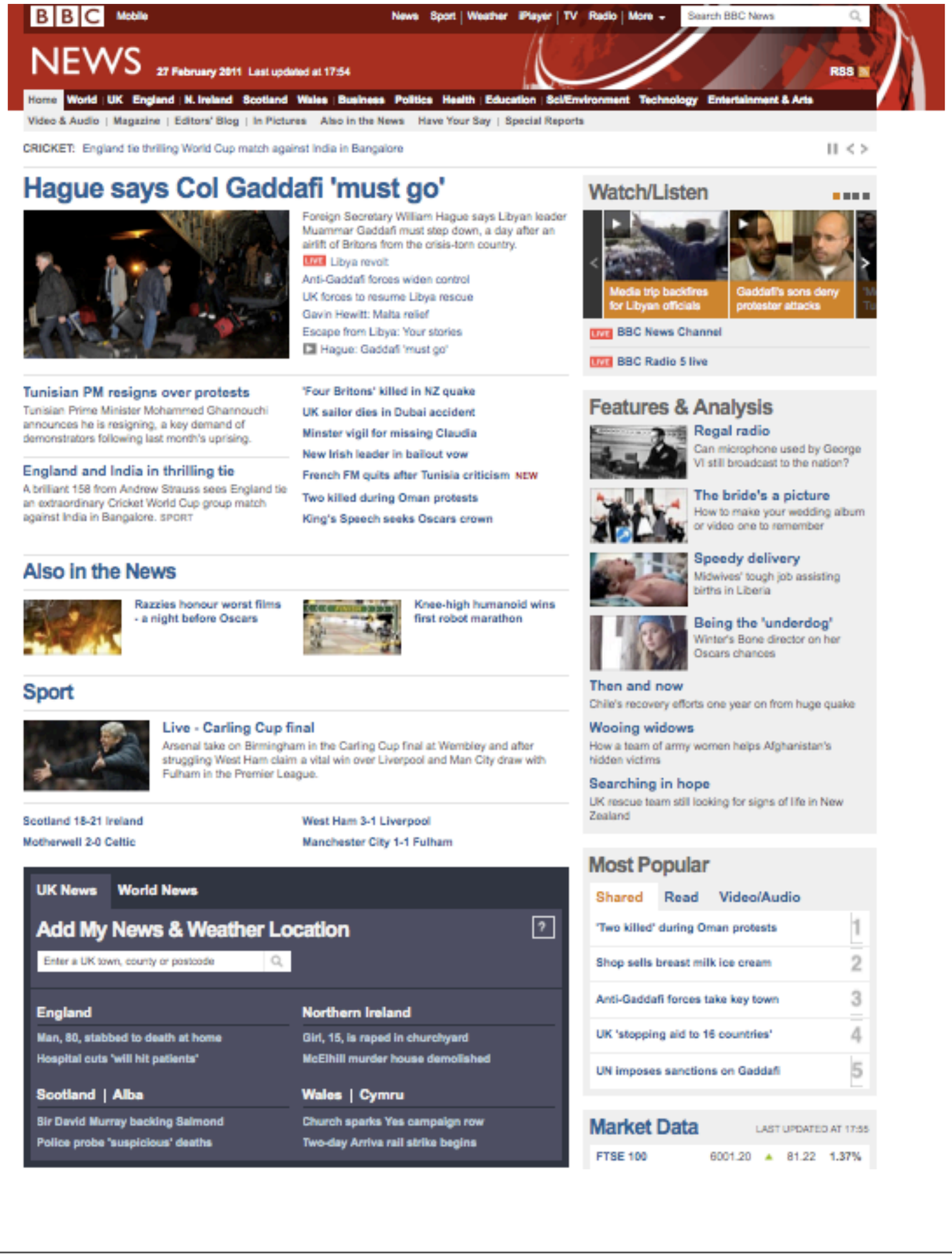
- Move top three stories to right-hand side to keep within viewport.
- Horizontal navigation inserted in top.
- Tablet landscape is not that far away from current desktop look.

# Desktop

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- Desktop has extra content + interface design for mouse clicking (not fingers).
- We didn't build the desktop version, but agreed the principals of how we can.
- Remember, it's the same code running in all 6 devices.

# Dimensions, Connection Speed, Interaction

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- Screen size is most important thing for quality of UX, then connection speed, then interaction.
- Dictates amount of content i.e. Can't serve everything at low-spec phones.
- We need to decouple device size from connection speed

... iPad 3g needs a optimized experience to the iPad wifi.

# Content Models

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- We need to reduce the amount we initially serve to devices :-

  - **Core** – what's baked in to the initial page load – headlines, story, video
  - **Secondary** – related, eg. Most Read, Promotion, 'Features'

- Also. Brand  (GEL) + Navigation + Search.
- It's an editorial judgement or a users judgement?
- The core model supports crappy hardware and old IE4/5/6 browsers too.
- Current desktop site has ~65 assets and a page weight of 0.5MB
  ... a core model might be ~3 images and 6kb of HTML

bbc.co.uk/news/breaking

bbc.co.uk/news/popular

bbc.co.uk/news/popular/read

bbc.co.uk/news/:article/comments

bbc.co.uk/news/:article/more

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- Problem when we remove content we make it inaccessible to Google, to Non-JS devices, so we need to mint more pages so users can still traverse all the content.
- Easy on forge, quite hard on CPS (?)

# Image enhancement



- If connection speed + device size allow we replace the images with high resolution versions.

# Gestures



- JS implementation of swipe ok on Android 2.2, iOS, Samsung tablet.
- Needs to use CSS3 transitions for performance (not JQuery).

# Local storage

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- Ran out of time to integrate properly.
- We think it's not impossible, but 2/3 weeks effort.
- The sync model is the complicated part.

# Product

- Validate content models with Editors
- Personalisation
- Pan-BBC



- Pan-BBC? Eg, Land on the News homepage, swipe left for Weather, swipe right for Sport
- Personalisation - Apps allow this, desktop doesn't

# Design

- Do you tie together to many disparate users experience? Or is bespoke better?
- Gestures/UX are more limited that native apps.
- Existing desktop site as fluid layout?
- CPS images are too low-res

# Technical

- JS loaded editorial content.
- Need to test the a hybrid app.
- Flash -> SVG (Specials)
- Reliable way to detect bandwidth
- DEMI? Do we really need it?
- Big screen - applicability?

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- DEMI, probably more useful for hard to detect things like media support
- JS loaded content mildly controversial.

# Next

- Scope & more investigation
- Dependencies -> BLQ, EMP mobile ...
- CPS output
- Staff

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- Scope. probably not going to take it as far as desktop by July.
- Mainly within our control, though touches on other products.
- 3 developers for 3/4 months with help from existing mobile team.