



# MitID i Praksis

Fra NemID til MitID

Webinar den 18. juni 2020

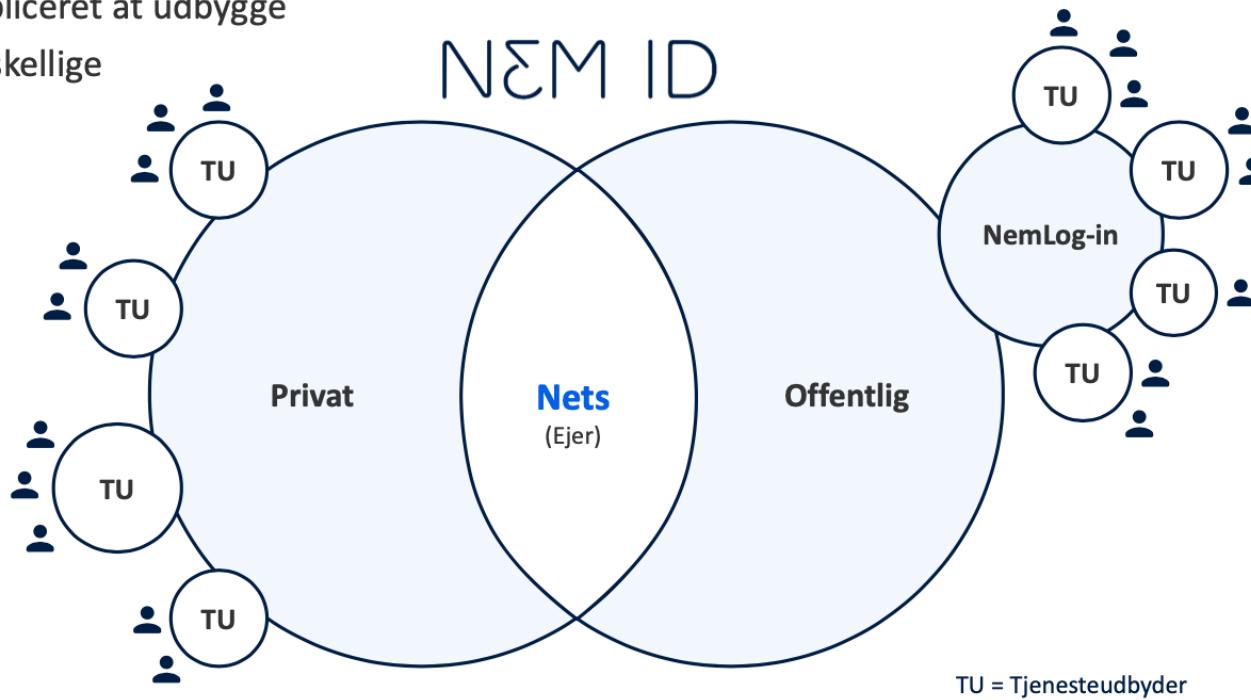


# Indhold

- 1 Hvad er MitID?
- 2 MitID broker – hvad og hvorfor?
- 3 Ændringer i brugeroplevelsen
- 4 Ændringer i den tekniske integration
- 5 Signering af tekst og dokumenter
- 6 Criipto gør MitID – og overgangen fra NemID – smidig og fleksibel

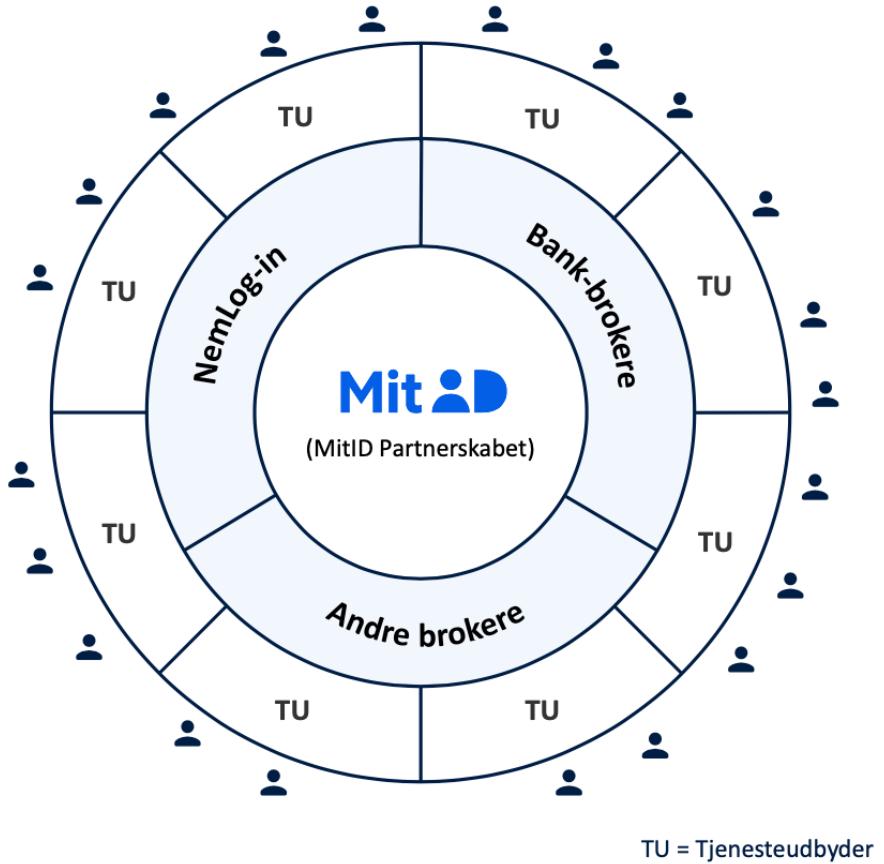
## Fra NemID...

- ✓ Fungerer fint, men er ikke fremtidssikret
- ✗ Er dyrt og kompliceret at udbygge
- ✗ Består af to forskellige systemer



## ... til MitID

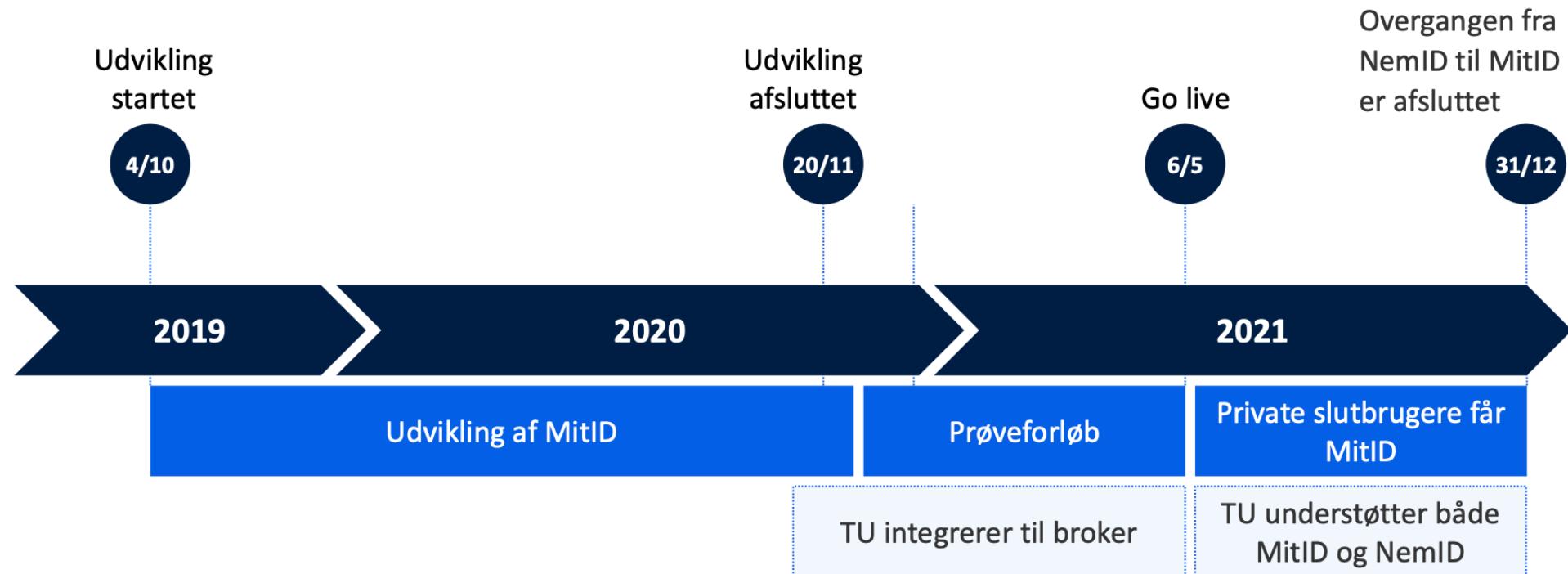
- ✓ Fremtidssikret – fleksibelt og modulært
- ✓ Nemmere at udbygge
- ✓ Ét samlet system



### For jer betyder det, at:

- I skal have MitID for fortsat at kunne autentificere jeres private brugere.
- I får adgang til MitID gennem en broker, som I selv vælger.
- Brokerne gør anvendelsen lettere for jer, samtidig med at de varetager vedligeholdelsesopgaven op imod MitID-kernen.

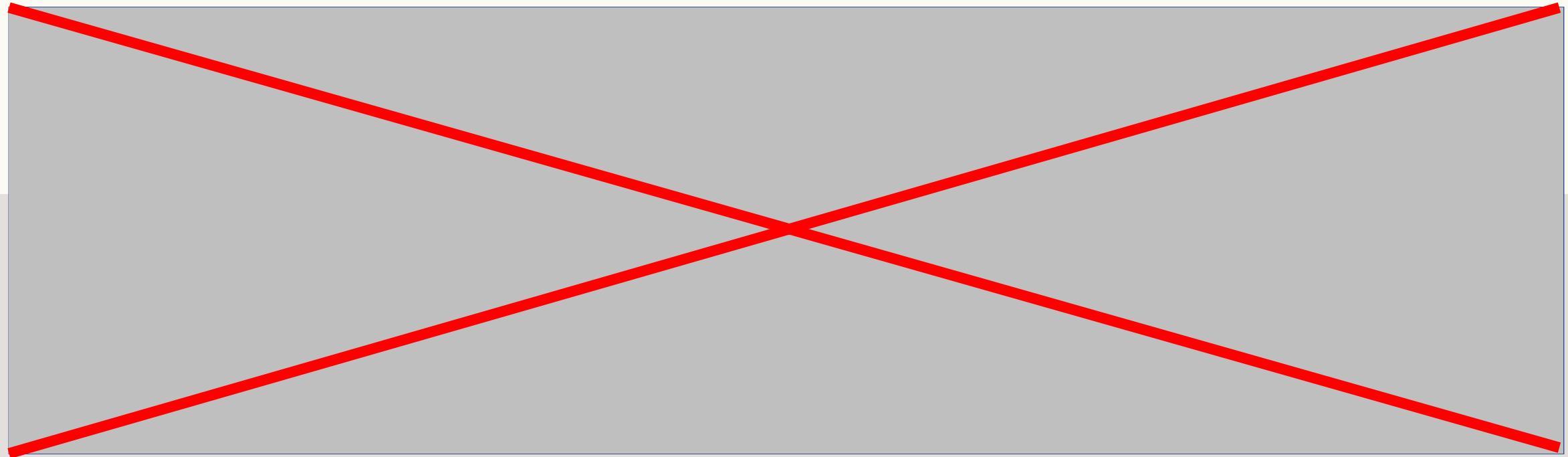
# Tidsplan



# Indhold

- 1 Hvad er MitID?
- 2 MitID broker – hvad og hvorfor?
- 3 Ændringer i brugeroplevelsen
- 4 Ændringer i den tekniske integration
- 5 Signering af tekst og dokumenter
- 6 Criipto gør MitID – og overgangen fra NemID – smidig og fleksibel

# Teknisk og kommercial adgang til MitID via broker



# Indhold

- 1 Hvad er MitID?
- 2 MitID broker – hvad og hvorfor?
- 3 Ændringer i brugeroplevelsen
- 4 Ændringer i den tekniske integration
- 5 Signering af tekst og dokumenter
- 6 Criipto gør MitID – og overgangen fra NemID – smidig og fleksibel

# NemID i dag

The screenshot shows the Tryg website's main navigation bar with links for 'Forsikringer', 'Forsikringstjek', 'Anmeld skade', 'Kundeservice', and a search bar. Below the navigation, there is a large 'Log ind på Min side' button. A tooltip above this button says 'Klik her, hvis du er erhvervskunde'. An 'iframe' placeholder is present. To the right, there is a section titled 'Alt om dine forsikringer, samlet ét sted' with a list of benefits:

- ✓ Se dine forsikringsaftaler, som viser, hvordan din
- ✓ Ret i forsikringer efter dine behov
- ✓ Find dokumenter og betalingsinformation
- ✓ Anmeld ny skade og se dine tidligere skader

Below this, a note states: 'På Min side gemmer vi dine oplysninger til statistik og markedsføring. Du kan vælge at slå det fra. [Læs mere](#)'.

Further down, there is a section titled 'Brug for hjælp til at logge på Min side' with a note: 'Vi har samlet forskellige vejledninger til kendte problemer i forbindelse med at logge på Min side.' A 'Hjælp til log ind' button is located at the bottom of this section.

This screenshot shows the same Tryg website layout as the first one, but with a tooltip pointing to the 'iframe' placeholder. The tooltip contains the text 'Klik her, hvis du er erhvervskunde' and 'iframe 310.33 x 218'. Below the tooltip, there is a blue 'NEM ID' login form with fields for 'Bruger-id', 'Adgangskode', and 'Næste', along with a 'Glemt kode?' link. To the right of the form, there is another section titled 'Alt om dine forsikringer, samlet ét sted'.

# NemID i dag

18+ | Spil med omtanke | Stopspillet.dk | Rofus.nu

Danske Spil ELEFRE SPIL Om os Forhandlere Spil med omtanke Hjælp

Du logger ind på RØD KONTO

**Hvad er en RØD KONTO?**

Med en RØD KONTO hos Danske Spil kan du spille Lotto, Vikinglotto, Eurojackpot, Keno, Joker, Quick og Alt eller Intet eller oprette et PLUS abonnement udbudt af Danske Lotteri Spil.

Har du problemer med at logge ind? Kontakt vores [Kundecenter](#).

Har du andre problemer med NemID? Find hjælp hos [NemID](#)

**NEM ID**

Danske Spil

Bruger-id  Husk mig

Afgangskode [Glemt kode?](#)

[Næste](#)

Kommer du fra Færøerne? [Log ind](#)

**LYN LOTTO**

X

Du logger ind på RØD KONTO X

**NEM ID**

Danske Spil

Bruger-id  Husk mig

Afgangskode [Glemt kode?](#)

[Næste](#)

**Har du IKKE en RØD KONTO?**

Har du ikke en RØD KONTO, oprette dig som kunde hos Danske Lotteri Spil, før du kan logge ind og spille.

[Opret dig her](#)

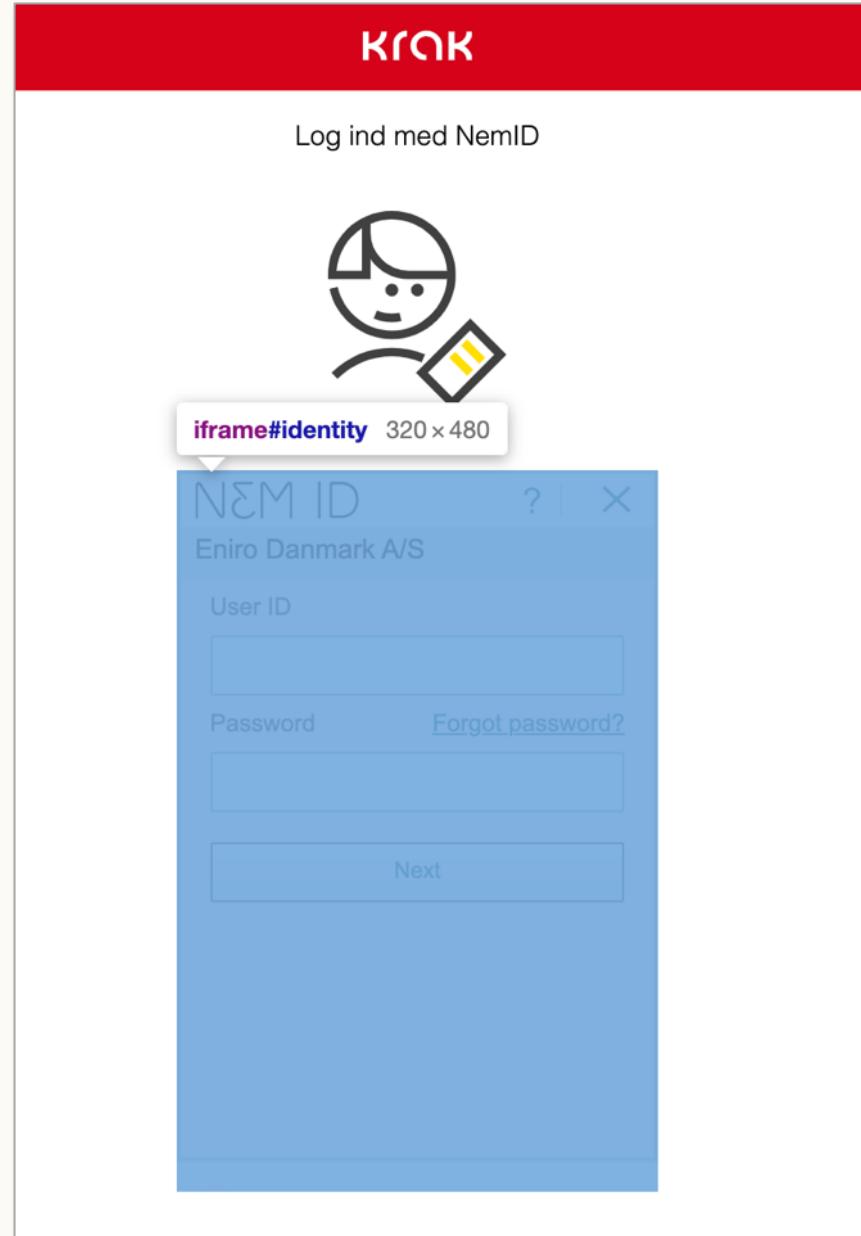
Kommer du fra Færøerne? [Log ind](#)

**Har du IKKE en RØD KONTO?**

Har du ikke en RØD KONTO, skal du oprette dig som kunde hos Danske Lotteri Spil, før du kan logge ind og spille.

[Opret dig her](#)

# NemID i dag





cripto

# MitID integreres via en certificeret Broker

Log ind på Min side

Log på <Tjenesteudbyder> **MitID**

BRUGER-ID

FORTSÆT →

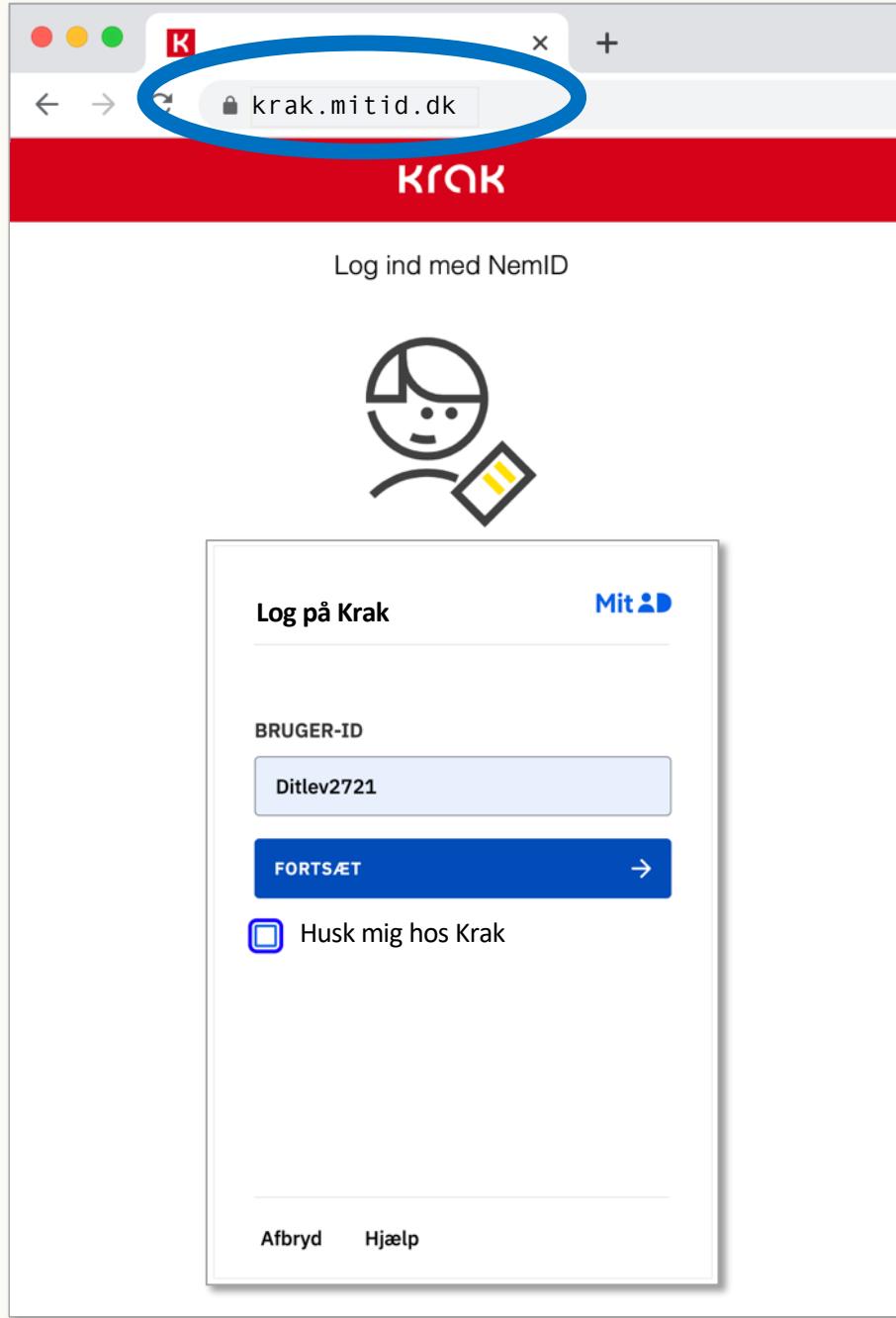
Husk mig hos <Tjenesteudbyder>

Afbryd Hjælp

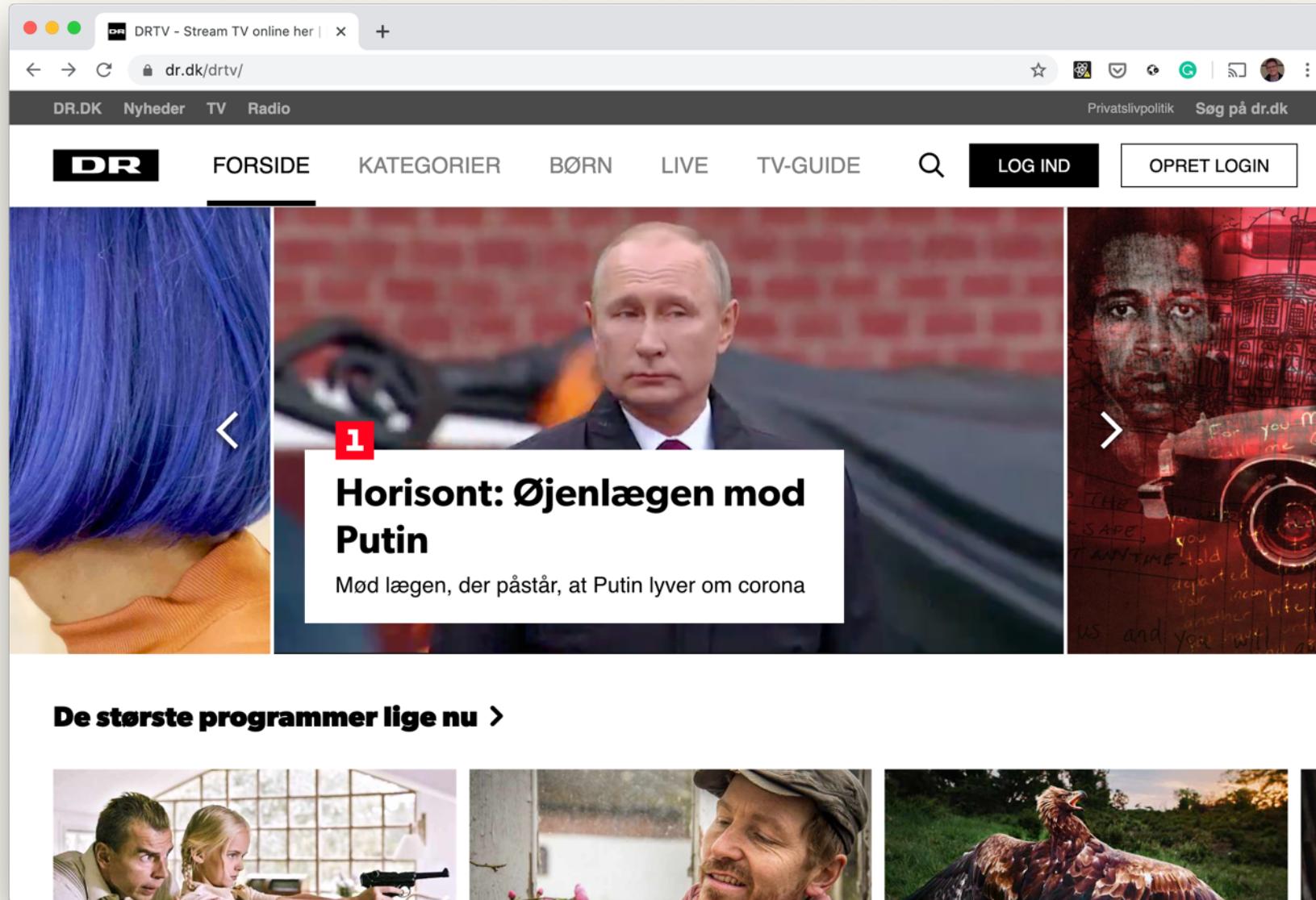
Criipto is a Copenhagen based company aiming to revolutionise how personal data is shared, stored and processed. We believe in online privacy for all and neat and simple solutions.

The sectors we serve: finance, fintech, medical, education, real estate, insurance, accountancy, sharing economy, legal and peer to peer.

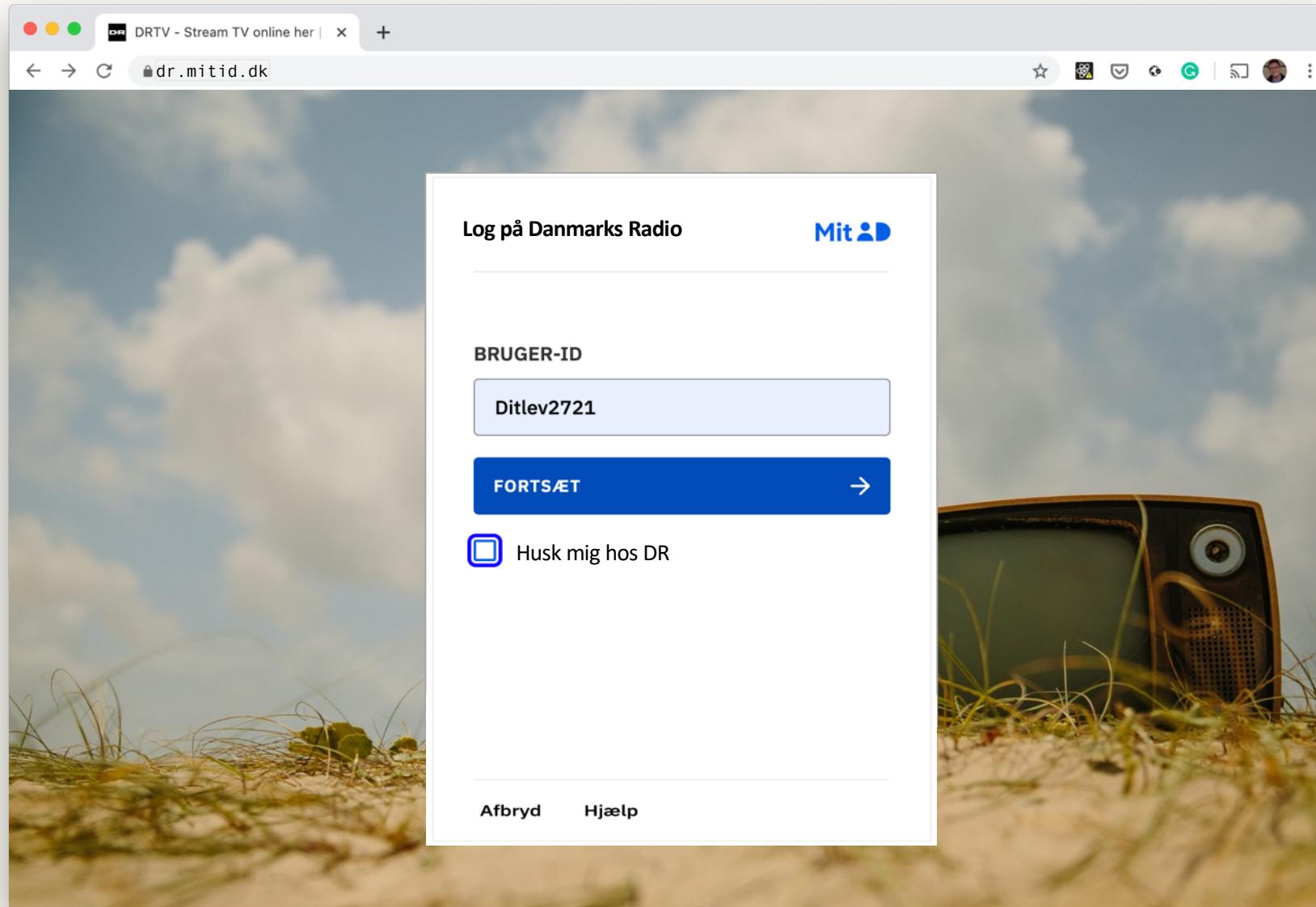
MitID integration  
skal gå via  
en landing page  
leveret af brokeren



# MitID via fuld redirect til broker landing page



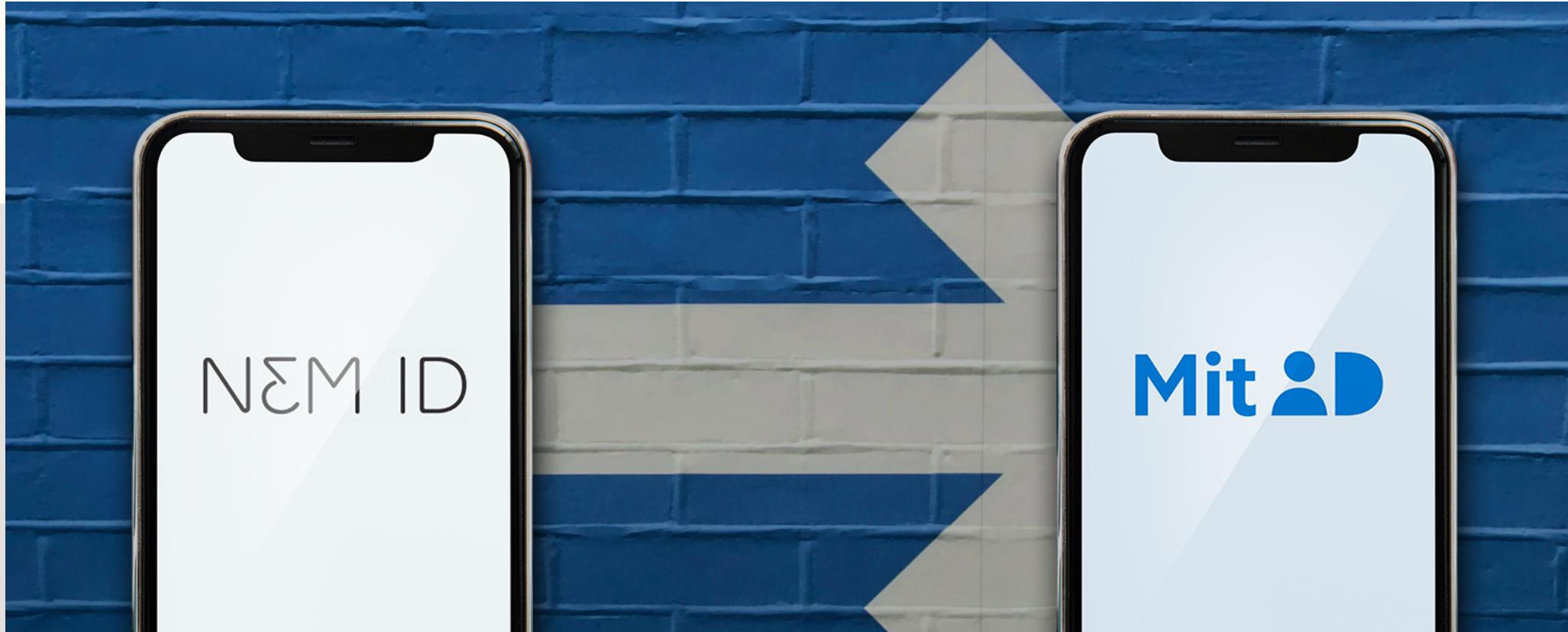
# MitID broker landing page – stylet til virksomheden



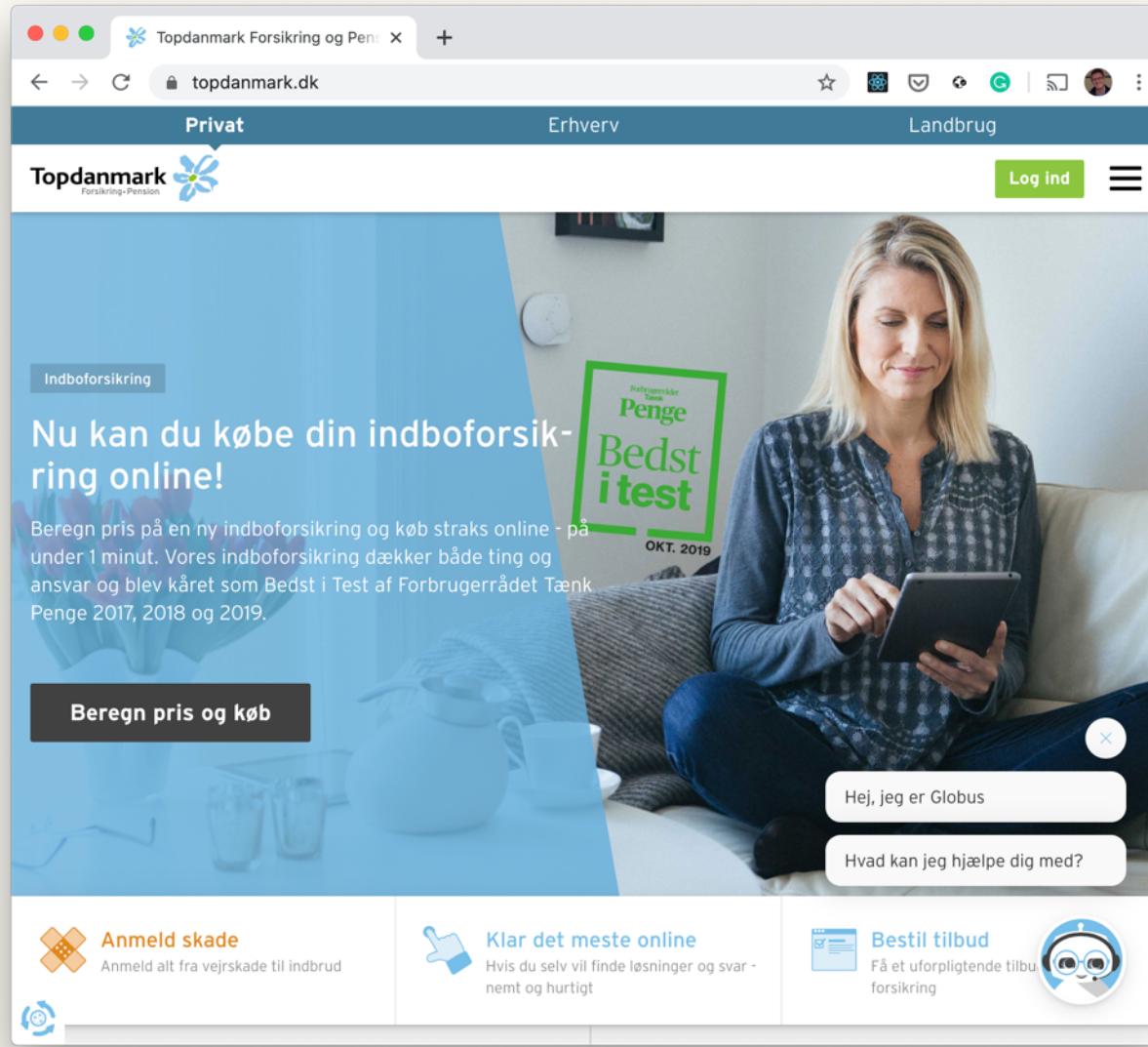
# MitID via popup som viser broker landing page

The image shows a dual-browser setup. On the left, the DR.DK website is open, specifically the DRTV section. It features a program listing for "Horisont: Øjenlægen mod Putin". On the right, a separate browser window displays the DR Login page, which is a MitID broker landing page. This page prompts the user to enter their BRUGER-ID (Ditlev2721) and provides a blue "FORTSÆT" button. There is also a "Husk mig hos DR" checkbox.

# Overgangsperioden fra NemID til MitID



# NemID og MitID sammen



# NemID og MitID sammen

## *Alternativ 1: Tilføj MitID til eksisterende side*

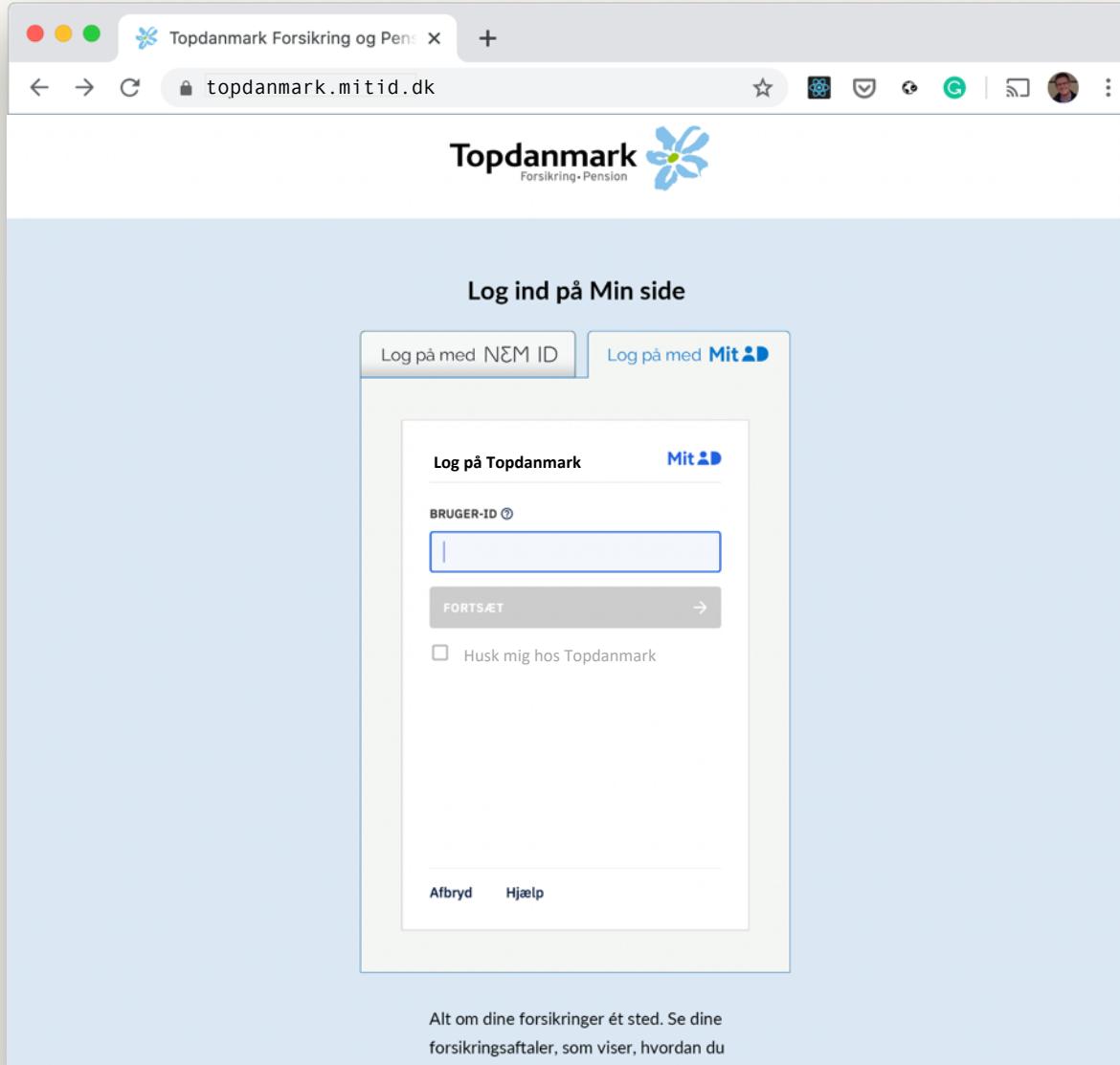
The screenshot shows the login page for Topdanmark ([topdanmark.dk/log-ind/](http://topdanmark.dk/log-ind/)). The page is divided into two main sections: 'Log ind med dit NemID' (Log in with your NemID) and '- Eller brug MitID' (Or use MitID).  
**NemID Form:** A form for entering a NemID, including fields for 'NEM ID' (with placeholder 'Topdanmark Forsikring'), 'Brugerkode' (password), and 'Adgangskode' (access code). There is also a link 'Glemt kode?' (Forgot password?).  
**MitID Logo:** A logo for 'MitID' featuring the word 'Mit' in blue and 'ID' in a stylized blue shape.  
**Information Box:** A box titled 'I Mit Topdanmark kan du bl.a.' (In Mit Topdanmark you can do b.l.a.) containing three green checkmarks:

- Få overblik over dine forsikringer og din pension
- Anmelde og se status på skader
- Justere, hvordan du er dækket

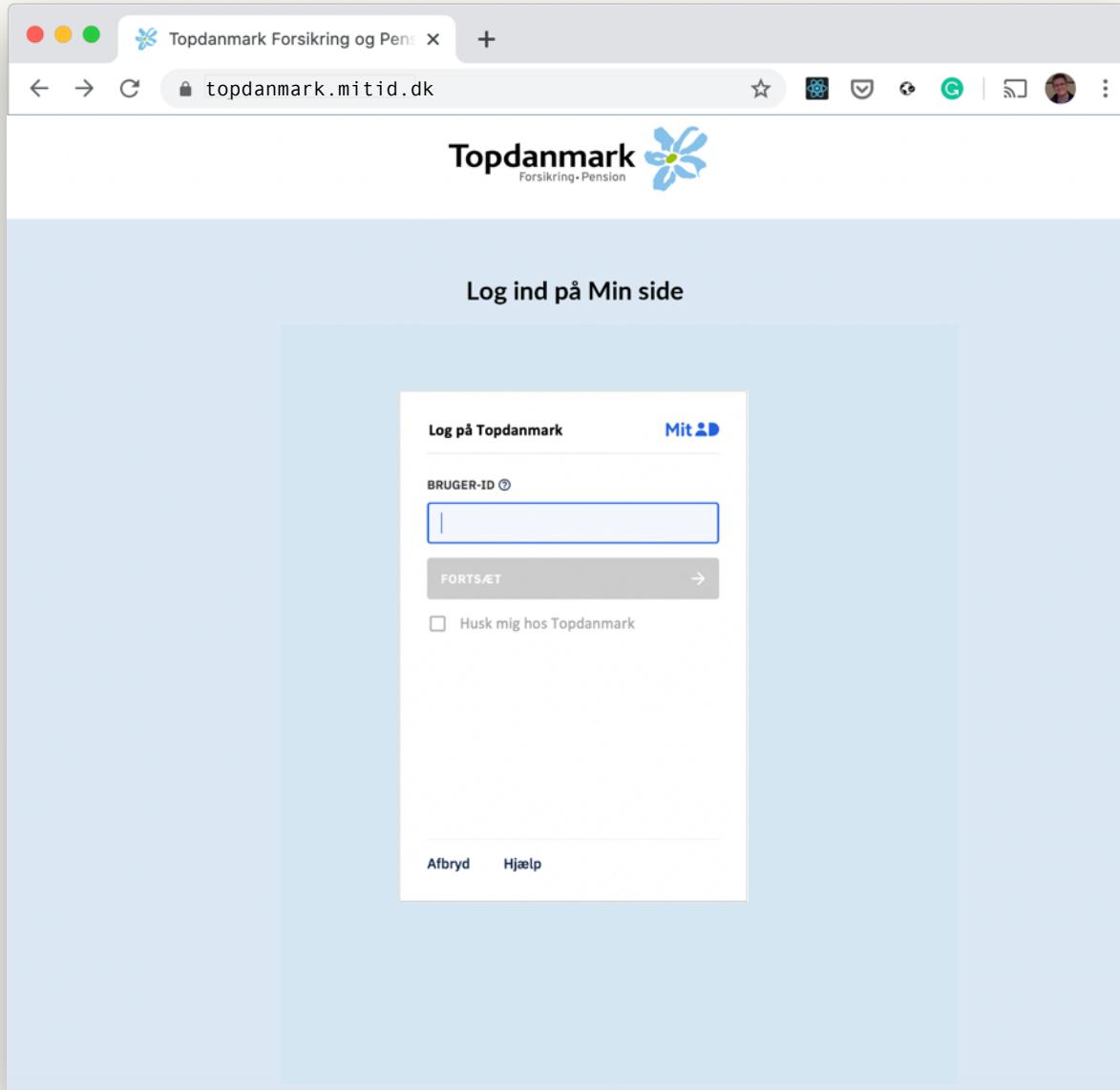
**Important Note:** A note at the bottom left reads: 'Vigtigt: Luk alle vinduer i din browser, når du logger ud. Ellers risikerer du, at andre kan få adgang til dine personlige oplysninger.' (Important: Close all windows in your browser when you log out. Otherwise, you risk others gaining access to your personal information.).  
**Other Links:** Below the NemID form is a link 'Log ind med nøglefil' (Log in with key file). At the bottom left is a section 'Vidste du?' (Did you know?) with the text: 'Hvis du har en personligt ejet virksomhed, kan du nu logge' and an icon of a person holding a key, followed by the text 'med dit private NemID og se forsikringer for både dig og din virksomhed.'

# NemID og MitID sammen

## *Alternativ 2: Lad brokeren håndtere skiftet*



# Efter udfasning af NemID fra 1/1-2022



# Indhold

- 1 Hvad er MitID?
- 2 MitID broker – hvad og hvorfor?
- 3 Ændringer i brugeroplevelsen
- 4 Ændringer i den tekniske integration
- 5 Signering af tekst og dokumenter
- 6 Criipto gør MitID – og overgangen fra NemID – smidig og fleksibel

# Obligatorisk skift til broker - teknik

- 1 Skift til føderet, dvs. uddelegeret, autentifikation (via OpenID Connect)
- 2 Vælg – pr. applikation – mellem redirect eller popup
- 3 Med redirect kan det meste håndteres vha. standard OIDC plugins til både serverapplikationer og SPA'er
- 4 Hvis popup afhænger håndtering af typen af applikation, men non-standard komponenter/kode er nødvendige (som f.eks. det kommende criipto-auth.js)

# Server side konfiguration

## Initialisér OIDC modulet

```
.AddOpenIdConnect(options => {
    options.ClientId = Configuration["Criipto:ClientId"]; // ClientID from application registration
    options.ClientSecret = Configuration["Criipto:ClientSecret"]; // Client from application registration
    options.Authority = $"https://{{Configuration["Criipto:Domain"]}}/"; // Domain from application registration
    options.ResponseType = "code";

    // The next two settings must match the Callback URLs in Criipto Verify
    options.CallbackPath = new PathString("/callback");
    options.SignedOutCallbackPath = new PathString("/signout");

    // Hook up an event handler to set the acr_value of the authorize request
    // In a real world implementation this is probably a bit more flexible
    options.Events = new OpenIdConnectEvents() {
        OnRedirectToIdentityProvider = context => {
            context.ProtocolMessage.AcrValues = context.Request.Query["loginmethod"];
            return Task.FromResult(0);
        }
    };
});
```

# Client side konfiguration og autentifikation

Initialisér forbindelsen til autentifikationsserveren (OIDC)

```
var criipto_auth = new CriiptoAuth({
  domain: 'kurts-flyttefirma.criipto.com',
  clientID: 'urn:kurt:clients:12345',
  desktopStrategy: 'popup',
  mobileStrategy: 'redirect',
  responseMode: 'query' // use 'fragment' for SPA
});
```

# Client side konfiguration og autentifikation

## Kald autentifikationsserveren (OIDC)

```
criipto_auth.authorize({
  acrValue: 'dk:mitid:personal',
  levelOfAssurance: 'substantial',
  redirectUri: window.location.href
}, function(err, authResult) {
  // this function is called if you use popup mode
  // handle the result
});
```

# Client side konfiguration og autentifikation

For en SPA samles identiteten op fra fragmentet

```
// For SPA's pick up the return token from the fragment
cripto_auth.parseHash({ hash: window.location.hash }, function (err, authResult) {
    // do some error handling
    webAuth.userInfo(authResult.token, function (err, user) {
        // now you have the user's information
    });
});
```

# Indhold

- 1 Hvad er MitID?
- 2 MitID broker – hvad og hvorfor?
- 3 Ændringer i brugeroplevelsen
- 4 Ændringer i den tekniske integration
- 5 Signering af tekst og dokumenter
- 6 Criipto gør MitID – og overgangen fra NemID – smidig og fleksibel

# Signering i browseren

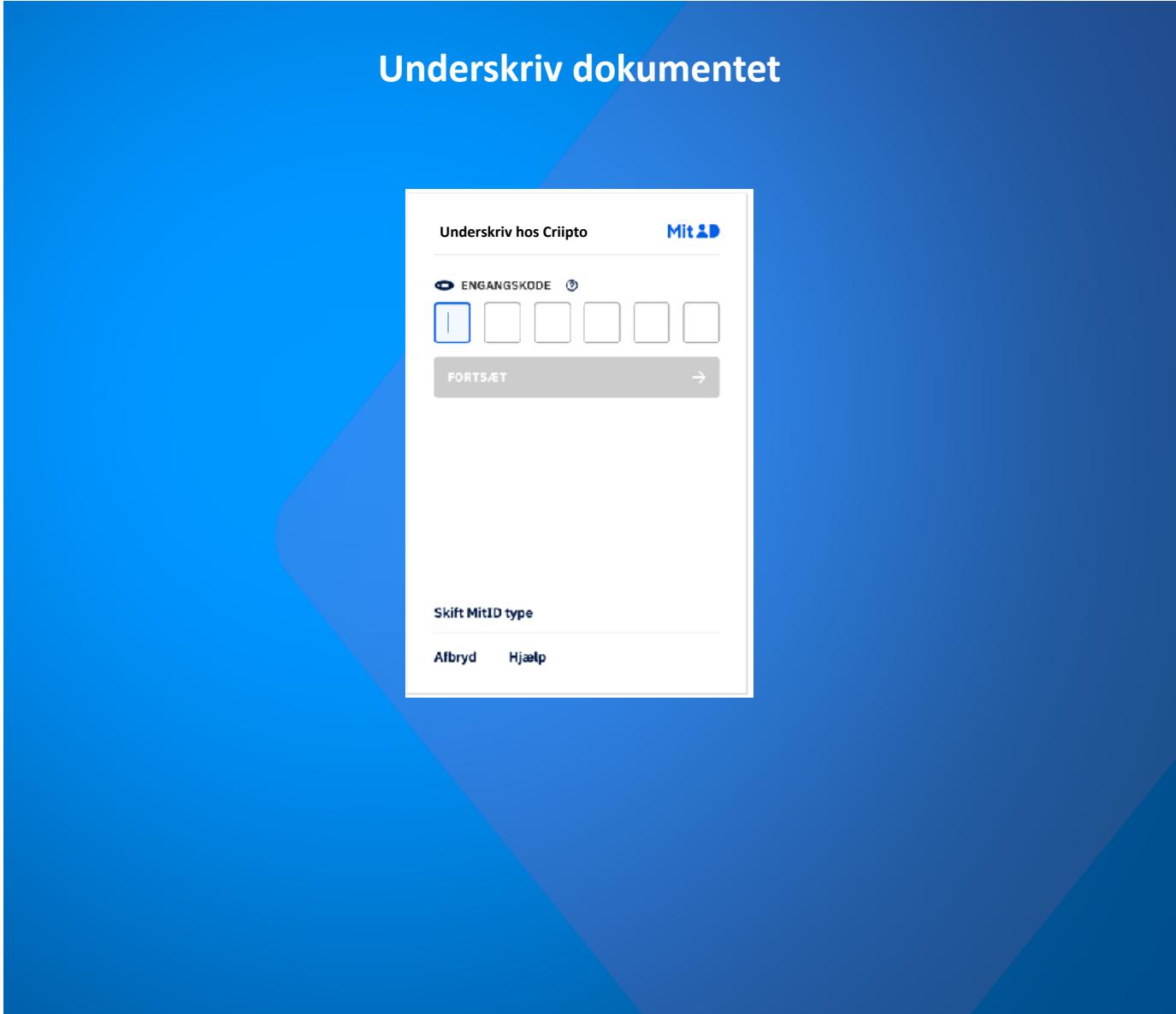
Læs og underskriv dokumentet

OCES transaktioner siden januar 2014

Samlede antal transaktioner siden januar 2014

Jeg har læst dokumentet  FORTSÆT →

# Signering i browseren med "step up" MitID



# Indhold

- 1 Hvad er MitID?
- 2 MitID broker – hvad og hvorfor?
- 3 Ændringer i brugeroplevelsen
- 4 Ændringer i den tekniske integration
- 5 Signering af tekst og dokumenter
- 6 Criipto gør MitID – og overgangen fra NemID – smidig og fleksibel

# Criipto som broker

- 1 Fuld selvbetjening. Gratis indtil produktion
- 2 Support direkte fra udviklere hele vejen i gennem – bl.a. på Slack
- 3 Andre e-ID'er også, f.eks. svensk og norsk BankID
- 4 Egen styling og tilpasning af login- og signeringsssider
- 5 Udvid med egen kode f.eks. check mod eget CRM
- 6 Pris baseret alene på antallet af transaktioner i produktion

# Criipto Verify – Identity as a Service

The screenshot shows the Criipto Verify dashboard. On the left, there's a sidebar with 'criiptoverify' branding, a 'PRODUCTION TEST' switch, and tabs for 'Dashboard', 'Applications', 'Domains', and 'Identity sources'. Under 'Applications', it lists 'A Sales Portal demo' and 'Another demo'. For 'A Sales Portal demo', it shows 'Name: A Sales Portal demo', 'Available on domain: acme-corp.criipto.id (connected to Auth0)', and 'Client ID/Realm: urn:auth0:auth0-demo-criipto'. A note at the bottom says 'The realm must be unique for each application.' On the right, the main area has a blue header with 'Menu', 'Operations status', the Criipto logo, 'Documentation', 'Pricing', 'Log in', and 'Sign up'. The main content area features a large image of a hand holding a smartphone displaying the Criipto app interface with 'Log in with your national ID NemID Denmark NEM ID'. Text on the page includes 'Simplest way to set up NemID, BankID, and other e-IDs in your app', a 'Start your free trial' button, and a section titled 'Why developers love Criipto Verify' with icons for 'All-in-one e-ID' (blue gear), 'Ready in no time' (red alarm clock), 'Easy integration' (blue gear), and 'Great support' (orange speech bubble).

# Dashboard and Slack support

The diagram illustrates the Criipto Verify platform interface, divided into several sections:

- Top Bar:** Shows navigation tabs (Dashboard, Applications, Domains, Identity sources), environment selection (PRODUCTION TEST), and user account (acme-corp).
- Get started:** A section for setting up your first application, containing:
  - Register your application with Cripto Verify. Go to the [Applications](#) section
  - Configure your application for *OpenID Connect* integration with Cripto Verify
  - Log in with test users in your application. Test users may be [found here](#).

Check the documentation for examples on integrating Cripto into your specific programming framework.
- Move to production:** A section for transitioning from test to production, containing:
  - Register with e-ID providers to get a certificate
  - Subscribe to a paid Cripto Verify subscription
  - Set up your production domain in the [Domains](#) section
  - Register your production application in the [Applications](#) section. Register it on a production domain such as the one created in the previous step
  - Real people with a real e-ID may now log in to your application
- Support:** A section for Slack support, featuring the Slack logo and instructions to sign up for the support channel. It includes a text input field for email and a "Send" button.
- Production configuration:** A large panel for managing production configurations, with a yellow header bar labeled "Production configuration".
- Operations status:** A section for monitoring system status, with a "Subscribe to status updates" form and a table of checked services:

✓	Cripto Verify Authentication Core
✓	E-ID services
✓	Swedish BankID
✓	Norwegian BankID
✓	Danish NemID

# Registrér din applikation

The screenshot shows the criipto verify application registration interface. On the left, there's a sidebar with 'Dashboard', 'Applications' (selected), 'Domains', and 'Identity sources'. Below this are sections for 'Test applications' (listing 'A Sales Portal demo') and 'A Sales Portal demo' configuration. The configuration includes fields for 'Name' (set to 'A Sales Portal demo'), 'Available on domain' (set to 'acme-corp.grean.id'), 'Client ID/Realm' (set to 'urn:easyid:aspnet-core-demo'), and 'Callback URLs' (listing 'http://localhost:5000/signin-oidc', 'http://localhost:50418/signin-oidc', and 'https://localhost:5001/signin-oidc'). A checkmark icon is next to the 'Callback URLs' section.

**Choose identities**

- DK MitID
- DK NemID
- SE BankID
- NO BankID
- NO BankID (phased out)
- NO Vipps

**OpenID Connect**

- Callback on location hash
- Enable OAuth2 Code Flow

**Client secret**

Does it match?

**Info**  
Enable the national identiti... application.

**Info**  
OAuth2 and OpenID Conn...  
*Callback on location hash*  
Enable this for single-page... available to JavaScript

*Enable OAuth2 Code Flow*  
Enable Authorization Code... Authentication settings (an...  
*User info response strateg...*  
We support 3 modes for re...

# Brug dit criipto.id domæne, eller registrer dit eget

The screenshot shows the criiptoverify web application interface. At the top, there is a navigation bar with the criiptoverify logo, a production/test toggle switch set to TEST, and a dropdown menu for 'acme-corp'. Below the navigation bar, there is a horizontal menu with tabs: Dashboard, Applications, Domains (which is selected), and Identity sources. The main content area is divided into sections:

- Test domains**: A list of three domains: testdom.criipto.me, testdomain1.criipto.me, and testid.flensted-jensen.com. The last item has a dropdown arrow icon.
- Test domain**: A form for configuring a domain:
  - Your domain name**: Input field containing testid.flensted-jensen.com.
  - Verify your domain settings**: A button.
  - SSL certificate (PFX/PKCS12)**: A file upload section with a 'Select a file' button and an upload icon.
  - Certificate password**: Input field with placeholder 'Enter your certificate password'.
- Info**: A section containing text: "To make your domain work you must configure a DNS CNAME record to point your domain to **idp.criipto.id**".

# NemID etc. er klar til test

**criipto verify**

PRODUCTION TEST

Test configuration

Dashboard Applications Domains Identity sources

Provider

DK NemID	You are all set. No need for any configuration
SE BankID	You are all set. No need for any configuration
NO BankID	You are all set. No need for any configuration
NO Vipps	You are all set. No need for any configuration
NO BankID (phased out)	<b>⚠️</b> You can still use this version, but is being phased out. You are all set. No need for any configuration
NL DigiID	

Customized styling (leave blank to use built-ins)

CSS for test

<https://docs.criipto.com/css/codan-styles.css>

**criipto verify**

PRODUCTION TEST

Production configuration

Dashboard Applications Domains Identity sources

Provider

DK NemID

Connect Danish NemID

Production environment

Certificate

Criipto ApS – NemID Grean

Valid from  
2017-12-13 09:39:17

Valid to  
2020-12-13 09:36:29

Select a file

Upload button

Certificate password

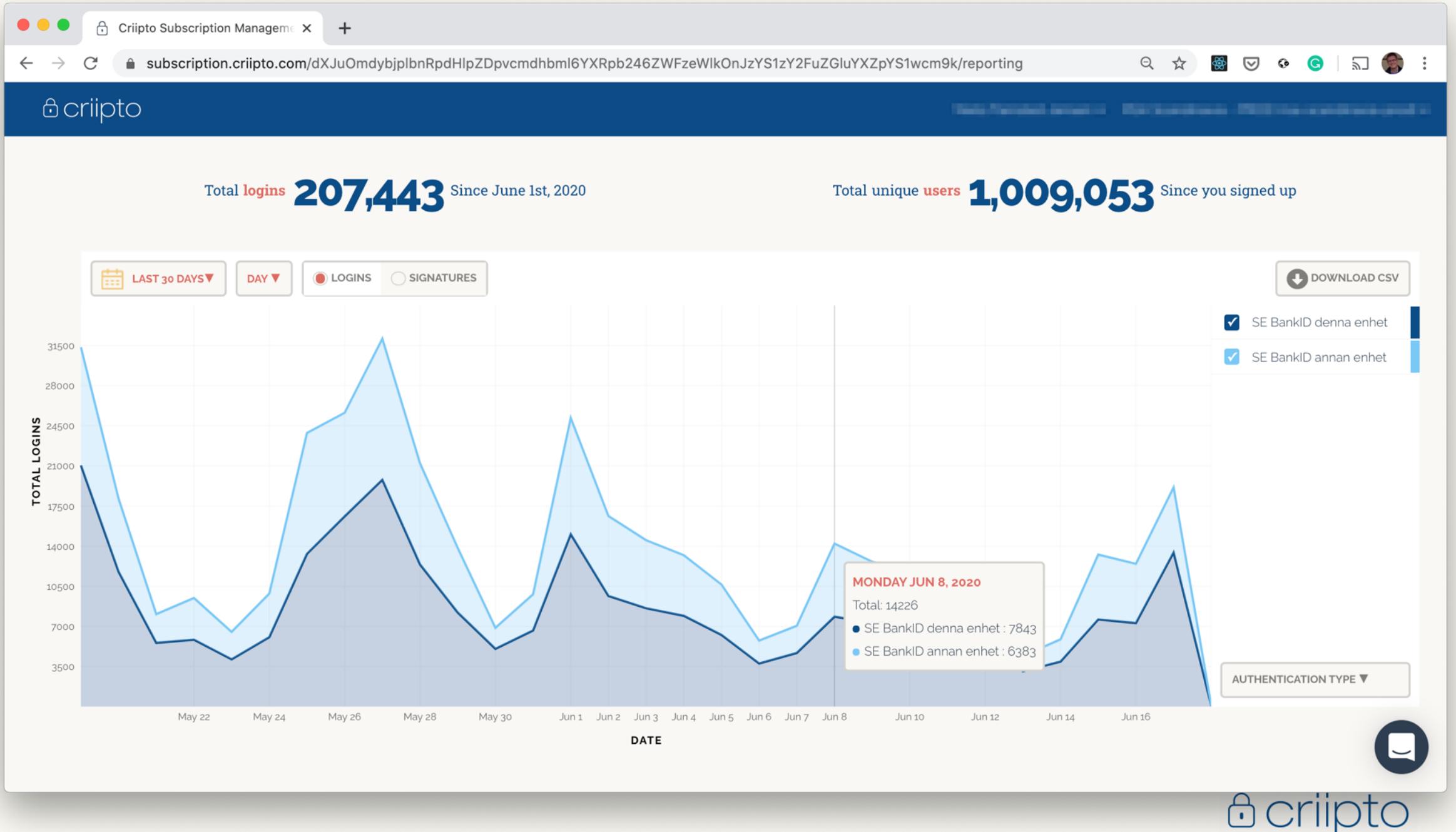
Info

Upload your certificate towards NemID

If you haven't done this, [aftale here](#)

You have selected the production environment. NETS will handle the certificate.

If you have any questions, get in touch with us. We will enable it for you.



A photograph of a person from the waist up, wearing a bright yellow zip-up hoodie. They are holding a black smartphone in their right hand, looking at the screen. The background is blurred, showing what appears to be a stone archway or bridge.

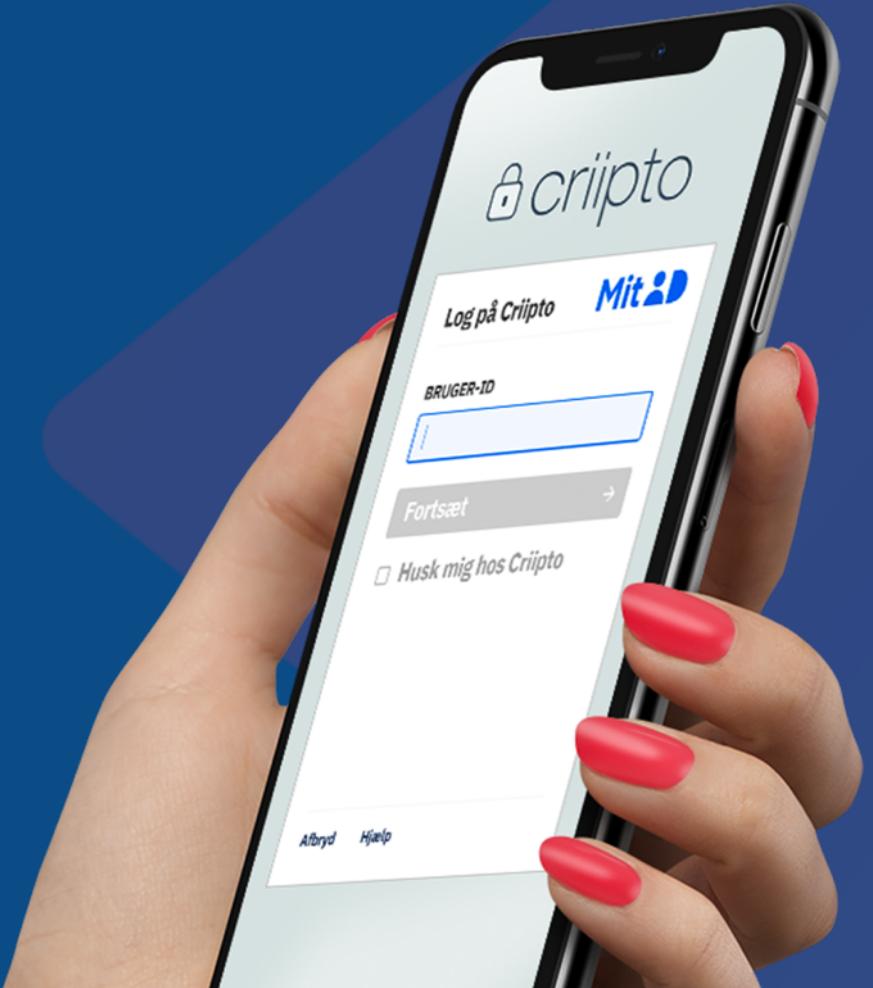
103.546 sikre logins/uge

# Identity Is the New Firewall

# Tak skal I have!

Start allerede i dag på  
[criipto.com](https://criipto.com)

Niels Flensted-Jensen  
[niels@criipto.com](mailto:niels@criipto.com)  
20 20 61 68



 criipto