

# Frictionless data & DCAT

**MATTEO FORTINI - Italian National Department for Digital Transformation**  
**2023-01-26**



# Department for Digital Transformation

## COMMUNITIES

### Developers Italia

Community of coders and civil servants to cooperate in the development of digital solutions and policies. Promoting the reuse of code through open source.

### Designers Italia

Community of designers and coders which develop accessible, up to date, responsive and flexible solutions for publishing web content. It publishes policies, design kits and sample websites and CMS themes.

### Open Government and Open Data

Collaborating with other administrations and the public to promote transparency and open government practices. Using open data to address problems together.

# Department for Digital Transformation

## PROJECTS

### PDND

National Digital Data Platform, API Catalog, National Data Catalog for semantic interoperability, guidelines for technical interoperability

### Repubblica Digitale

Improving digital competencies, not leaving anyone behind.

### Cloud

Developing policies and infrastructure for digital sovereignty and critical data protection.

### Connectivity

Connecting all buildings with at least 1Gbps bandwidth

### Digital Identity

SPID/CIE, eIDAS, digital wallet

### AppIO

One application to interact with all the Public Administrations

### PagoPA

One single point of contact for making payments to Public Administration

### MaaS Italy

Enabling nation-wide mobility and interoperability

### e-Health

Developing (inter)national digital services for health support

## **DIRECTIVE (EU) 2019/1024 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

# **On open data and the re-use of public sector information**

*Documents produced by public sector bodies [...] constitute a vast, diverse and valuable pool of resources that can benefit society. Providing that information, which includes dynamic data, in a commonly used electronic format allows citizens and legal entities to find new ways to use them and create new, innovative products and services.*

### **TRANSPARENCY AND ACCOUNTABILITY**

*Allowing the re-use of documents held by a public sector body adds value for the benefit of re-users, end users and society in general and in many cases for the benefit of the public sector body itself, by promoting transparency and accountability.*

### **DATA BASED SOCIETY**

*The evolution towards a data-based society, where data from different domains and activities are used, influences the life of every citizen in the Union, inter alia, by enabling them to gain new ways of accessing and acquiring knowledge.*

### **ECONOMY**

*Public sector information represents an extraordinary source of data that can contribute to improving the internal market and to the development of new applications for consumers and legal entities. Intelligent data usage, including their processing through artificial intelligence applications, can have a transformative effect on all sectors of the economy.*

## ITALIAN GUIDELINES ON OPEN DATA (PENDING APPROVAL)

**Application of these guidelines is not limited only to documents, but it applies also to data contained in those documents.**

This means, for example, that if a report with embedded tables is published, **both the document and the tables must be published separately**

# Open data publishing chain

Dataset  
distribution

Datasets

National  
catalog

European  
catalog

The collage illustrates the open data publishing chain through four screenshots:

- File Explorer (Left):** Shows the file structure for 'padigitale2026-opendata / data / avvisi.csv'. It displays file details (27 lines, 5.11 KB) and a list of dataset titles, including '1.3.1 Piattaforma Digitale Nazionale Dati - Comuni Ottobre 2022' and '1.4.4 Adozione SPID CIE-Amministrazioni diverse da Comuni e Scuole - Maggio 2022'.
- File Explorer (Middle):** Shows the file structure for 'padigitale2026-opendata / data /'. It displays a list of dataset files, including 'avvisi.csv', 'avvisi.json', and various 'candidature' files like 'candidature\_altrienti\_finanziate.csv' and 'candidature\_comuni\_finanziate.csv'.
- dati.gov.it (Right):** Shows the search results for 'pa digitale' on the 'dati.gov.it' website. It displays 31 datasets found, including 'Avvisi - PA digitale 2026' and 'Finanziamenti - PA digitale 2026'.
- data.europa.eu (Far Right):** Shows the search results for 'pa digitale' on the 'data.europa.eu' website. It displays 212,749 datasets found, including 'Warnings - Digital PA 2026' and 'Digital PA 2026 PNRR - Financing Applications (Schools)'.

# PA Digitale 2026 open data



Dipartimento per la trasformazione digitale Italia digitale 2026 Italia domani - PNRR [Accedi](#)

**PA digitale 2026**  
Le risorse per una PA protagonista della transizione digitale

[L'iniziativa](#) [Misure](#) [Avvisi](#) [Come partecipare](#) [Open data](#) [Supporto](#)

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## Open data

La trasparenza dei dati pubblici è un presupposto fondamentale per migliorare in maniera continua le politiche nazionali e permettere a tutti di esercitare una cittadinanza piena e consapevole.

La pagina di open data di PA digitale 2026 ha l'obiettivo di aumentare la quantità e la qualità di informazioni disponibili sui fondi del PNRR dedicati alla digitalizzazione della Pubblica Amministrazione, gestiti dal Dipartimento per la trasformazione digitale della Presidenza del Consiglio dei Ministri.



## Come accedere agli open data di PA digitale 2026

Per accedere ai dati aperti di PA digitale 2026 puoi consultare l'archivio che raccoglie i dataset relativi a candidature finanziate (a cui è stato assegnato un finanziamento dal relativo decreto) e avvisi pubblicati. I dataset sono disponibili in formato .csv o json. La licenza di riuso è CC-BY-4.0 (Creative Commons Attribution 4.0 International).

Descrizione dataset	Link	
Avvisi PA digitale 2026	<a href="#">CSV</a>	<a href="#">JSON</a>
Candidature finanziate Comuni	<a href="#">CSV</a>	<a href="#">JSON</a>
Candidature finanziate Scuole	<a href="#">CSV</a>	<a href="#">JSON</a>
Candidature finanziate Altri Enti	<a href="#">CSV</a>	<a href="#">JSON</a>

**Next Generation EU funds (€191.5 Bln) + Own funds (€30.6 Bln) for a total of €222.1 Bln**

**€ 6.74 Bln are dedicated to public sector digitalization and innovation (around 20,000 administrations are involved)**

**PA Digitale 2026 platform to manage all the complexity**

**Transparency, accountability, open government**

Search or jump to... Pull requests Issues Codespaces Marketplace Explore

[teamdigitale / padigitale2026-opendata](#) Public [Edit Pins](#) [Watch](#)

< Code Issues Pull requests Actions Projects Security Insights

main 1 branch 0 tags [Go to file](#) [Add file](#) [Code](#)

**padigitale2026-bot** Aggiunti dataset con split per avviso ✓ 218eb36 19 hours ago 775 commits

.github/workflows	Fix dubious ownership error for git	last month
assets	Aggiunto campo tipologia_entre a split_avvisi.py	last month
data	Aggiunti dataset con split per avviso	19 hours ago
dati	commit from VIP 2023-01-21 02:01:735	4 days ago
format	aggiunto format file per la 1.4.5	last week
img	Aggiunto bozza readme e logo	4 months ago
id	Candidature Scuole PNRR LD	2 days ago
metadata	Integrazione 1.4.5 in .rdf	last week
.gitignore	.DS_Store banished	3 months ago
AUTHORS	Fixed extension	3 months ago
CHANGELOG.md	fix changelog	last week
LICENSE	Fixed extension	3 months ago
README.md	Updated README	last week
datapackage.yaml	update datapackage per 1.4.5	last week

**README.md**

## PA digitale 2026 - Open Data

[Contributors](#) [Commits](#) [Pull requests](#) [Issues](#) [Discussions](#) [Packages](#)

### Descrizione

Questa repository contiene i dati pubblici estratti da [PA digitale 2026](#).

Nello specifico, i seguenti dati sono aggiornati quotidianamente alle 2:00 (UTC):



Ministero dell'Interno ACCEDI AI SERVIZI

**ANPR** | **Anagrafe Nazionale**  
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**CONOSCI L'ANPR**

Missione  
**Numeri**  
Notizie

**Numeri**

Conosci l'ANPR attraverso la rappresentazione dei dati principali sull'utilizzo del portale e dei servizi anagrafici.

Ultimo aggiornamento: 24/01/2023  
I [dati](#) sono disponibili in formato CSV e JSON su GitHub.

**DA SAPERE:**

- il conteggio della popolazione include i cittadini residenti in Italia e gli iscritti all'AIRE (residenti all'estero);
- i dati dei grafici riguardano le richieste effettuate sul portale, eccetto il servizio di cambio residenza, che aggrega le richieste effettuate sul portale con quelle presentate direttamente ai comuni.

**Personale in ANPR**

**65.669.819**

di cui 5.961.220 residenti all'estero (AIRE)

**Persone che hanno usato almeno un servizio anagrafico**

**3.350.518**

**Persone residenti in Italia**

Regioni: Tutte le regioni Provincie: Tutte le province Comuni: Tutti i comuni Filtra

**59.708.599**

Persone

## Distribuzione dell'utilizzo dei servizi

Visualizza: Tutti i servizi Ok

Clicca e trascina per spostarti sulla mappa, o scorla per fare zoom.

[Residenti](#)
[AIRE](#)
[Tabella dati](#)

## National Population Registry

## Interoperability vs all public administrations (once only principle)

## Availability of certificates to use outside the public administrations.

## Statistics, transparency, accountability, open government

Search or jump to... Pull requests Issues Codespaces Marketplace Explore

italia / **anpr-opendata** (Public)  
generated from teamdigital/open-data-repository-template

<> Code Issues 1 Pull requests Actions Projects Wiki Security Insights

main 1 branch 0 tags Go to file Add file

**anpr-opendata-team** Add files via upload ✓ 13b4a11 7 hours ago

.github	Fix concurrency group for update metadata
data	Update data 25-01-2023 06:17:50.320
format	Add files via upload
img	Add files via upload
metadata	Update modified date in RDF metadata
.gitignore	Initial commit
LICENSE	Licenza CC0
README.md	fix: align README due to deleted files
datapackage.yaml	fix: align metadata

README.md

frictionless **passing**

**ANPR - Open data**

**ANPR**

**Descrizione**

Questa repository contiene i dati pubblici estratti dalla pagina Numeri del portale ANPR.



## OPEN DATA PUBLICATION

# How, where and what?

### AUTOMATIC DATA PUBLICATION

We use scripts to publish data typically every day

### GITHUB REPOSITORY

GitHub is flexible and allows a presentation publication along with raw data

### CSV and JSON

One format for the web, the other for data analysis

### FRICIONLESS METADATA AND ACTIONS

Frictionless metadata is a standard and effective way to document data and it allows to use Actions for **data quality**

### DCAT-AP\_IT

Italian guidelines for data catalogs mandate the insertion of metadata in the DCAT-AP\_IT format (RDF/TTL). Some of the attributes are mandatory, while others are optional. These metadata are harvested and published by the national open data catalog

## Metadata

Which catalogs  
are available?

Which datasets  
in each catalog?

Which  
distributions for  
each dataset?

Which data in  
each dataset?

### DCAT\_AP-IT

Contents  
Themes  
License

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### Frictionless

Attributes description  
Datatypes  
Constraints

## THE DREAM...

### **One metadata to rule them all...**

Adding one file for each dataset describing both the catalog information and the data description and attributes.

# THANK YOU

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