



# The Brazilian National System of Civil Protection and Disaster Response: From Planning to Implementation of a National Strategy

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# Content

01 – Context

02 – Petrópolis and the Extreme Event

03 – S2ID functionality for Civil Protection activities

04 – Petrópolis Disaster Response Actions

05 – Lessons Learned

## Key Issues

- Present how the National Civil Protection System works based on a recent disaster of great local impact.
- The Petrópolis disaster, which happened in February 2022, represents the most representative and frequent damages and losses in Brazil.
- Present how the Integrated Disaster Information System (S2ID) tool operates a disaster response at Federal and Municipality level.
- Demonstrate the evolution of disaster preparedness and response in Brazil in the last decade, presented as lessons learned from the January 2011 disaster in the State of Rio de Janeiro.



**01**

**Context**

A white outline map of Brazil is positioned on the left side of the slide, set against a black background. The word "Context" is written in a white serif font across the center of the map's outline.

## Context

### National political-administrative outline

According to the last statistics, Brazil has a population of approximately 215 million inhabitants (2022). It is a Federative State composed of the Federal District, 26 States and 5,570 municipalities.

Like all sectorial policies, Civil Protection has the main guidelines defined at the Federal level, but with specific jurisdiction at the state and municipal levels, regarding a political-administrative autonomy.

This case study will present in detail the competences of each level of the Administration: Federal Government, State of Rio de Janeiro, Petrópolis municipality to illustrate the specific responsibilities of each involved actor in the process of disaster response and recovery in Brazil.



## Context

### What is the Sinpdec?

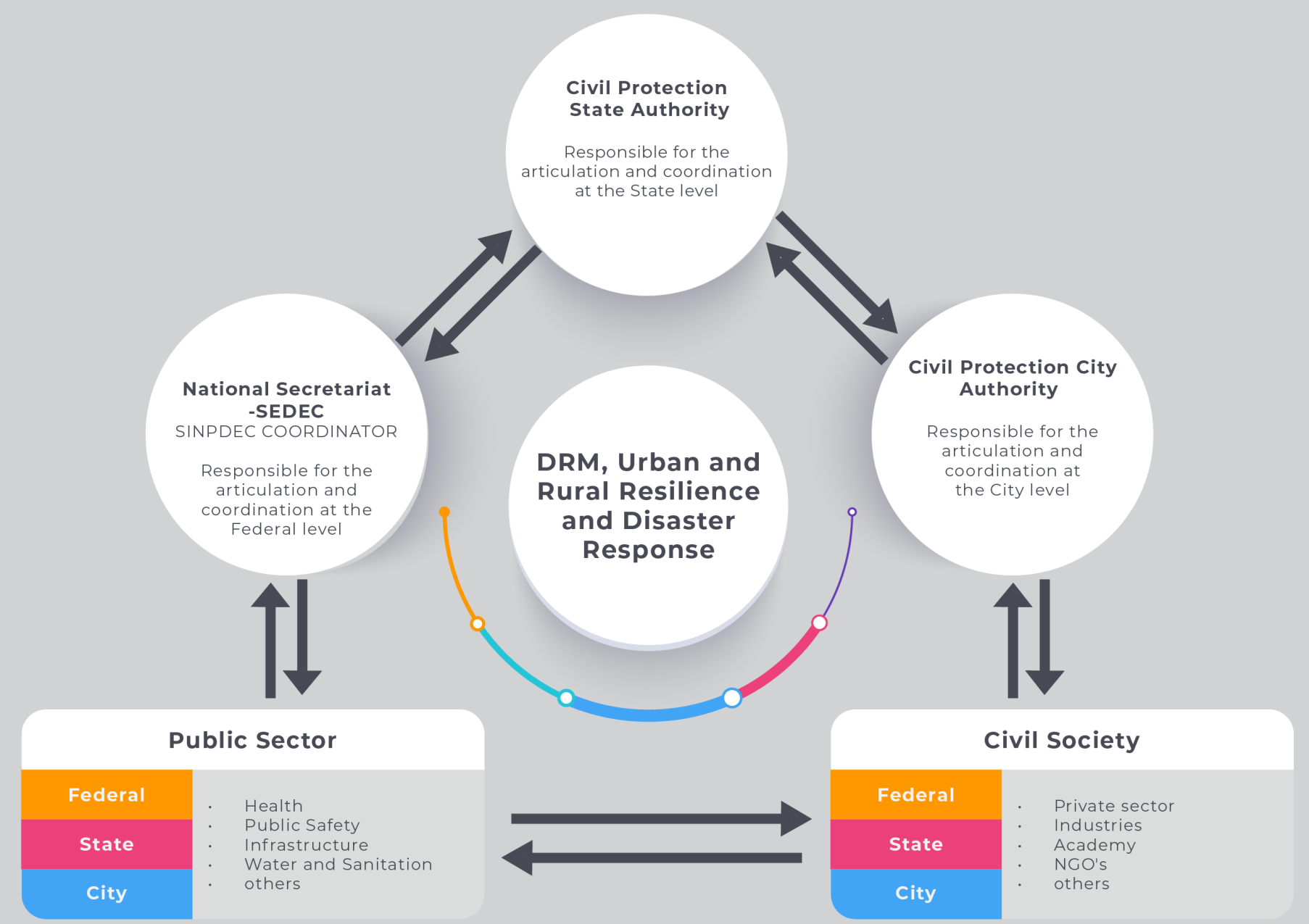
The Civil Defense in Brazil is organized as system namely, National System of Civil Protection (Sinpdec). It is managed by the National Secretariat of Civil Defense (Sedec).

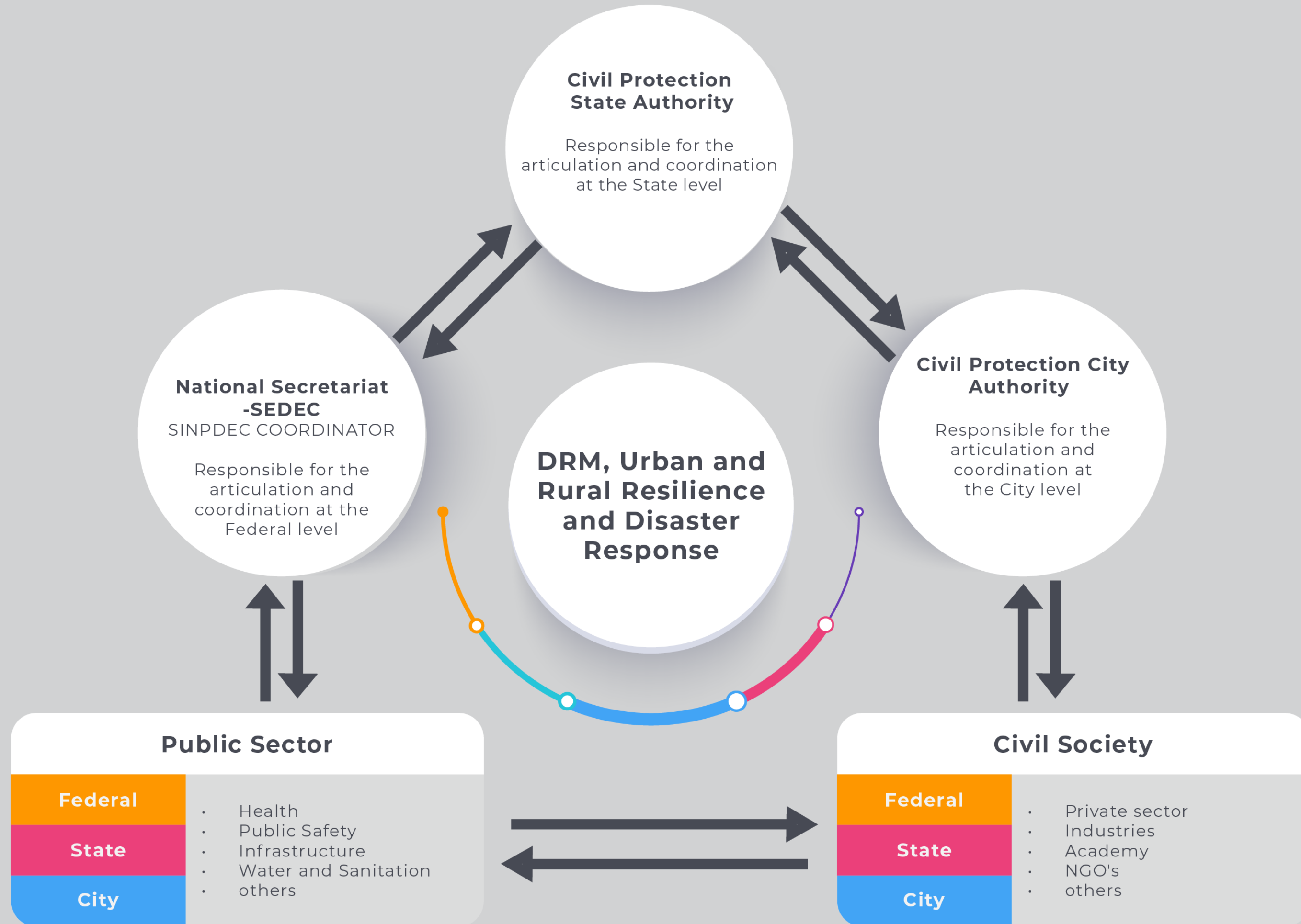
It is up to Sinpdec to implement the established doctrine in the National Policy for Civil Protection (PNPDEC). The Sinpdec encompasses Federal Systems, States and Municipalities. These actors work together, aligned in an integrated Public Policy of Civil Protection which focuses on disaster prevention, mitigation, preparedness, response and recovery.



Context

# Sinpdec's Structure







Responsible for coordinating Civil Protection actions throughout the national territory

Represented by Sedec / Ministry of Regional Development

**Central Government Agency**

**Federal System**

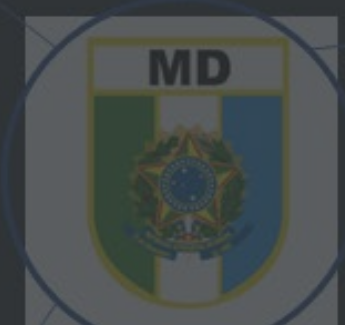
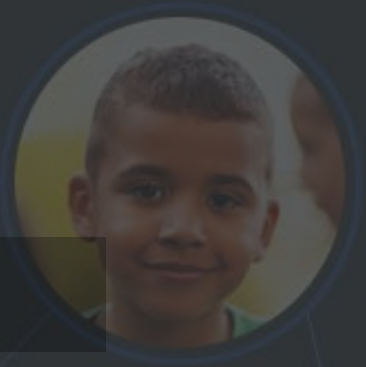
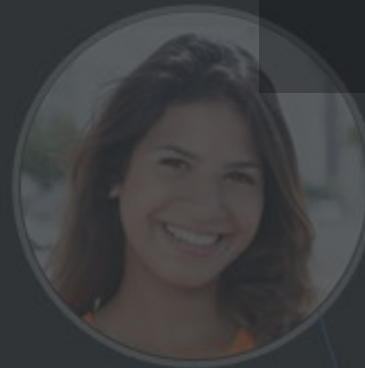
**State System**

**Municipal System**

Responsible for articulation, coordination and implementation of Sinpdec at the federal level.

Responsible for articulation, coordination and implementation of Sinpdec at the state level.

Responsible for articulation, coordination and implementation of Sinpdec at the municipal level.





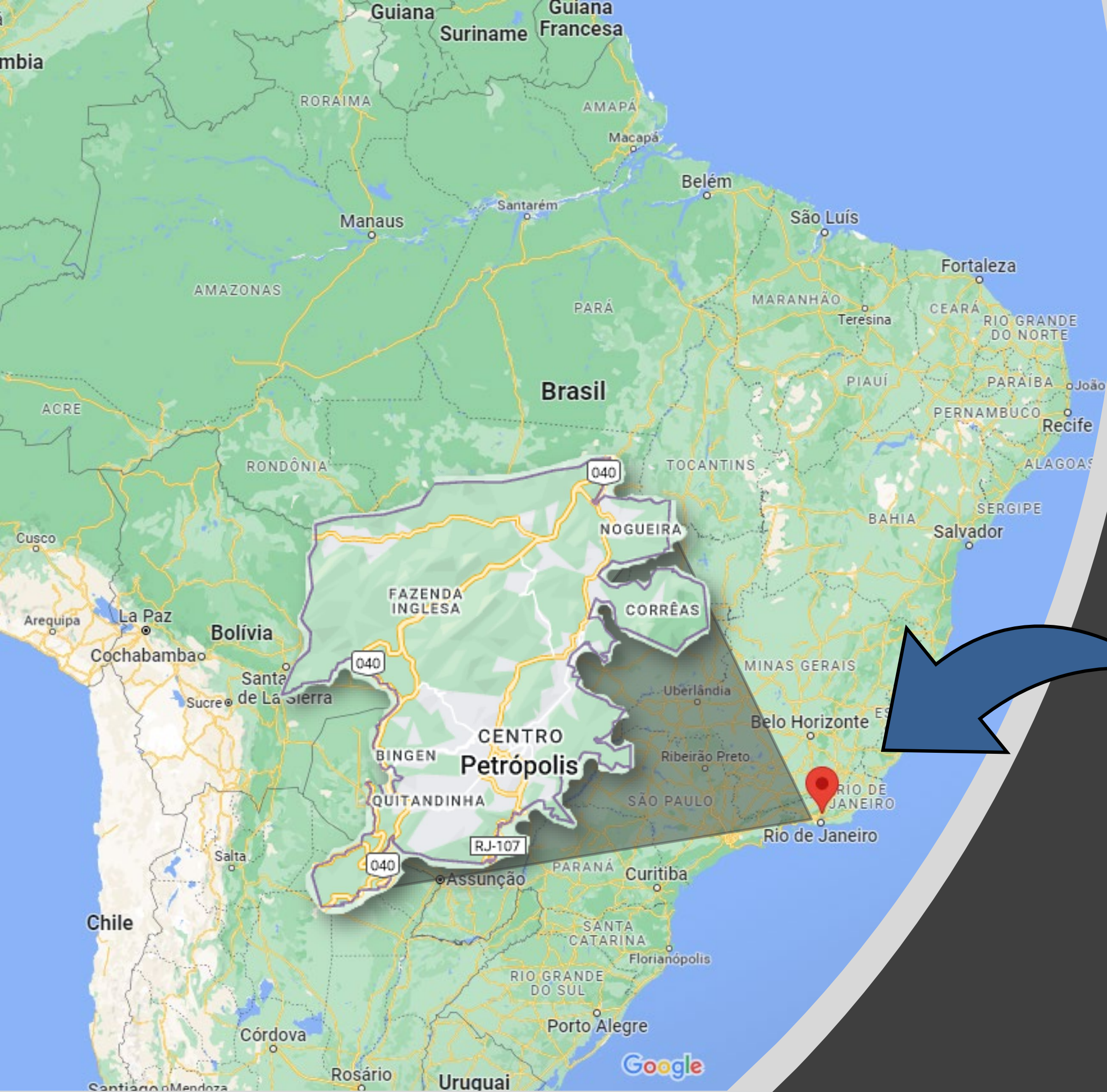
The operation and attributions of Civil Protection organizations are established by Law 12.608/2012, which defines the stages of acting: prevention, mitigation, preparedness, response and recovery.

These actions must have a systemic approach, integrating a cycle of action, involving different sectors of the Public Administration, such as Health, Infrastructure, Social Security, among others.

The case study will describe response and recovery actions triggered by the disaster event in Petropolis in February 2022. It will present the whole processing from weather monitoring, to disaster response management until defining a proposed Reconstruction Work Plan for affected communities.

**02**

**Petrópolis and  
the Extreme Event**



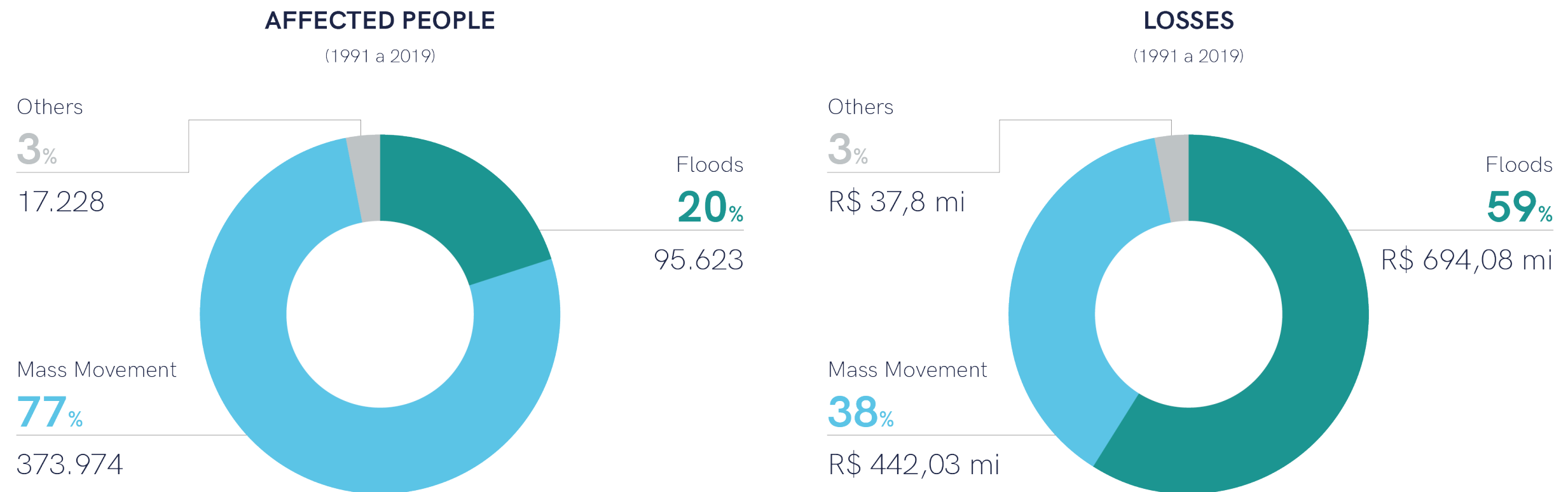
**Petrópolis - RJ**

# Risk Profile

## Petrópolis

A municipality located in the mountainous region of the Rio de Janeiro State with about 310 thousand citizens. It has a high-risk profile for hydrological events and was one of the most affected municipalities in the January 2011's disaster, considered the biggest disaster in Brazilian history, when over 1,200 people died.

The charts below presents the historical disaster profile.



## Petrópolis

On 02/15/2022 Petrópolis was affected by high precipitation (approximately 548.6mm in 24 hours) that severely affected local communities and infrastructure.

Main damages and losses:

- 120,000 people was directly affected
- 13,500 displaced
- 241 deaths
- 6,014 events reported (5,088 landslides)
- Approximately USD 40 millions in losses
- 100,000 tons of debris



**03**

**S2ID functionality for Civil  
Protection activities**

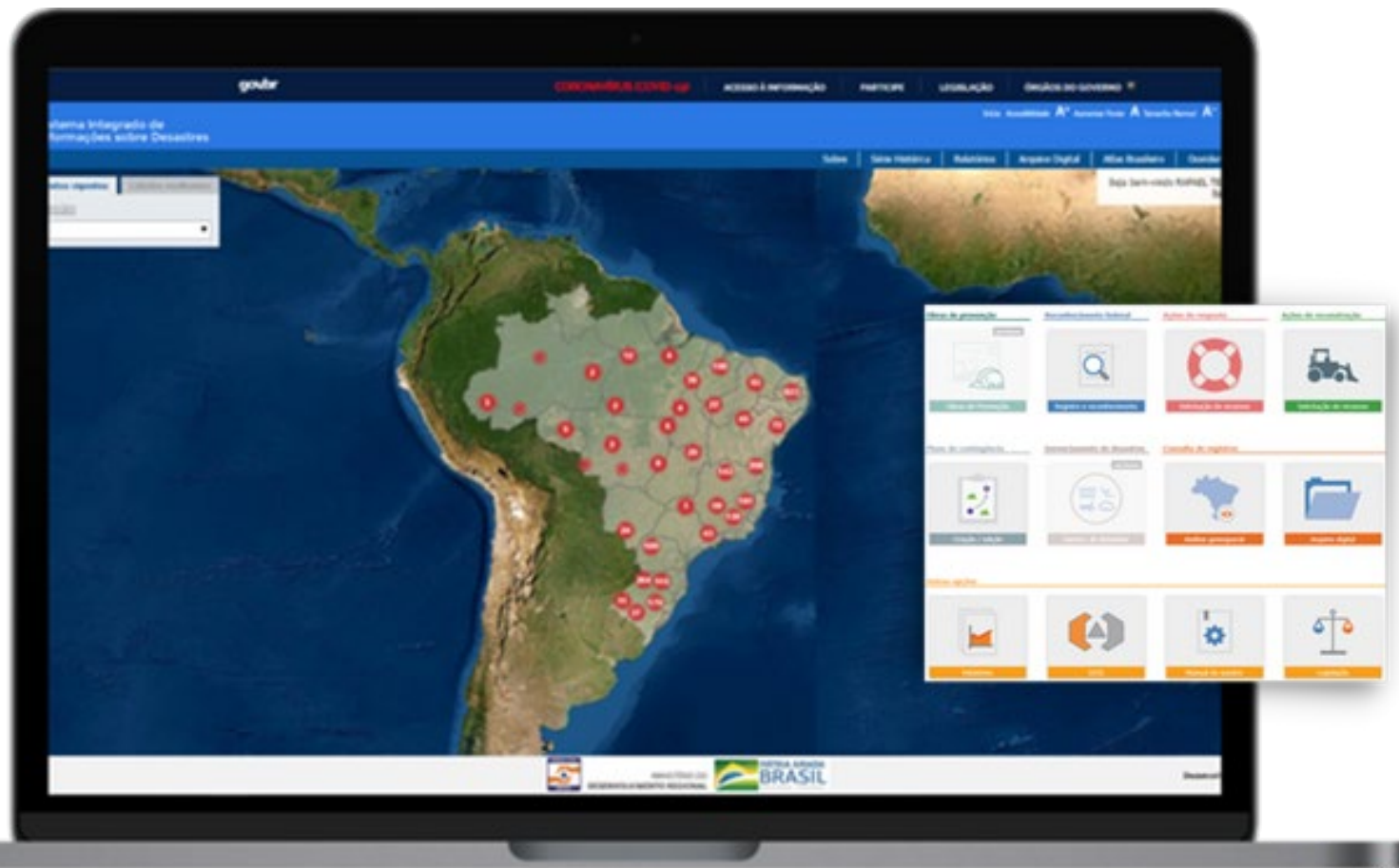
# The Integrated Disaster Information System (S2ID)



## S2ID

The Integrated Disaster Information System (S2ID) houses several Sedec products, with the objective to qualify and give transparency of risks and disasters management in Brazil. By transforming all processes into online software and collection of all disaster data in a structured database, the National and Subnational Governments are capable to better managed the complex process of disaster risk mitigation.

It currently has over 12,000 users, 88% of municipalities have at least one active user and as per 2022 statistics. Currently, 6,272 disasters were recorded.







The Decree 10.593/2020 assigns Sedec as the main authority to manage the S2ID implementation and coordination. It is the only instrument for states and municipalities to inform losses and damages, to declare emergency situations, to request Federal recognition of an emergency situation and to request Federal support for response and reconstruction.



## S2ID

The system was designed according to actions, phases, modules and the user profiles who have access.

### Modules

The modules represent each acting phases, according to the Civil Protection actions cycle.



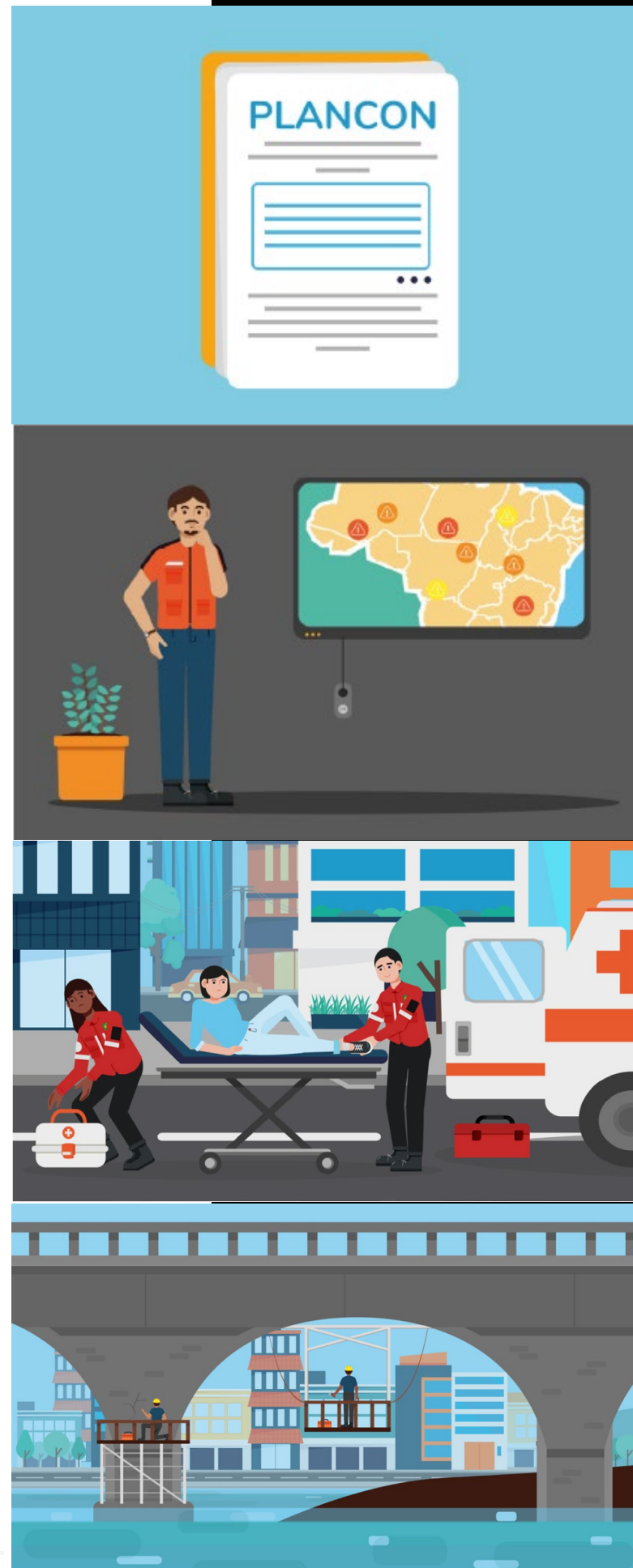
### Profile of Users

Civil Protection and agents:

- municipal
- state
- federal



# Preparedness, Response and Reconstruction



- Contingency Plan ("Plancon")
- Registration and communication of warnings and alerts
- Damages and losses reports (FIDE)
- Emergency situation declaration
- Post-disaster needs report
- Federal Recognition of an emergency situation
- Response and Rehabilitation request form
- Work Plan for infrastructure Reconstruction

# DISASTER RISK



## Federal Agencies

Monitor disaster risk hazards and send NOTICES, ALERTS and BULLETINS.

Obs: there are more agencies, here are just a few examples



## Cenad/Sedec

Process and consolidate information and forwards it to the Protection and Civil Defense agencies

## states and cities

Process and consolidate the informations and forward to the population



## Articulation

Industry technology solutions of integrated telecommunications into a single functional architecture.

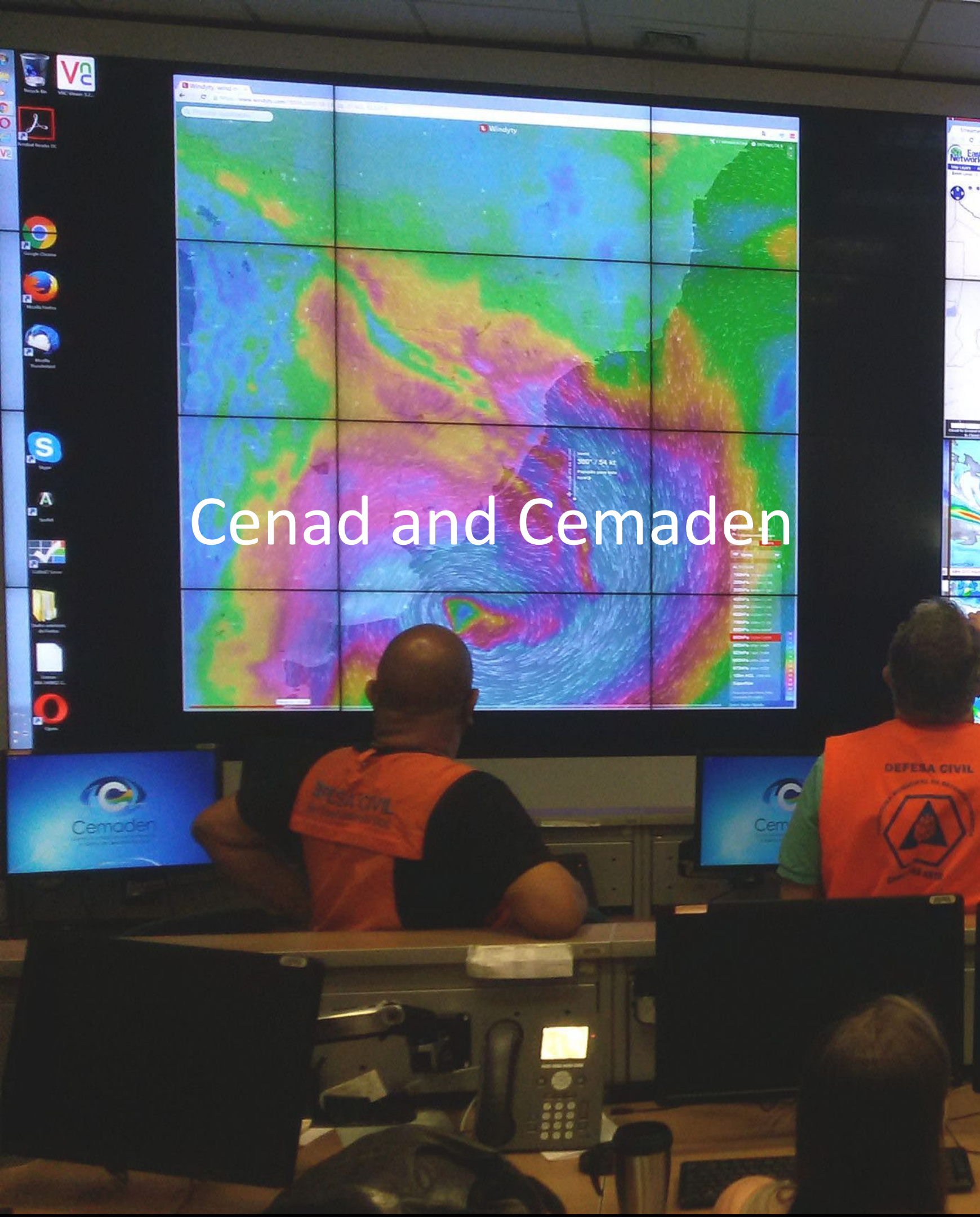


## Idap

Messages are sent to the registered users in respective locality. Participating Brazilian industries that are telephony service providers: "Claro", "Vivo", "Tim", "Oi", "Sercomtel", "Algar" and "Nextel"..

# S2iD

## Sistema Integrado de Informações sobre Desastres



Founded in 2011, the National Center for Monitoring and Natural Disaster Alerts (Cemaden), is responsible to issue alerts, using modern technologies for monitoring and hydrometeorological and geodynamic forecasts. It currently monitors more than 1,600 municipalities with a high-risk profile for floods and landslides.





## Cenad and Cemaden



**CENAD** Centro Nacional  
de Gerenciamento  
de Riscos e Desastres

The National Center for Risk and Disaster Management (CENAD) is the responsible, at the Federal level, for managing information on risks, alerts and response actions in articulation with the Civil Protection System Federal. On a daily basis, CENAD receives data for different Federal Government Institutions which, after analysis, goes into useful risk information shared with States' and Municipalities' Civil Defense.



**04**

Petropolis Disaster  
Response Actions

## Monitoring, Alert and Impact Assessment

02/13/2022 – Cemaden issue **the first alert** and inform Cenad.

02/13 – Cenad insert alert data in S2ID that **forwards information to municipalities and Rio de Janeiro State.**

02/13 to 02/15 – The alert level increases into a **red level.**

02/15 – Alert broadcasting by SMS, TV and Google Public Alerts (Cenad).

02/15 – Activation of **5 sirens in less than 1 minute** in risk areas. 18 in one hour.

02/15 - Mayor declares **Public Calamity.**

02/16 - Start of **rescue actions** by security authorities and release of roads.



## Formulário de Informações do Desastre - FIDE

### 1. Identificação

UF: -	Município: -	Código IBGE: -	
População (habitantes)	PIB (anual)	Orçamento (anual)	Arrecadação (anual)
421.203	17.692.000.000,00	2.454.678.930,00	2.172.120.000,00
Receita corrente líquida (mensal)		Receita corrente líquida (anual)	
152.691.717,82		1.831.220.613,84	

PROTOCOLO Nº SC-F-4265467-12200-26210311

### 2. Tipificação

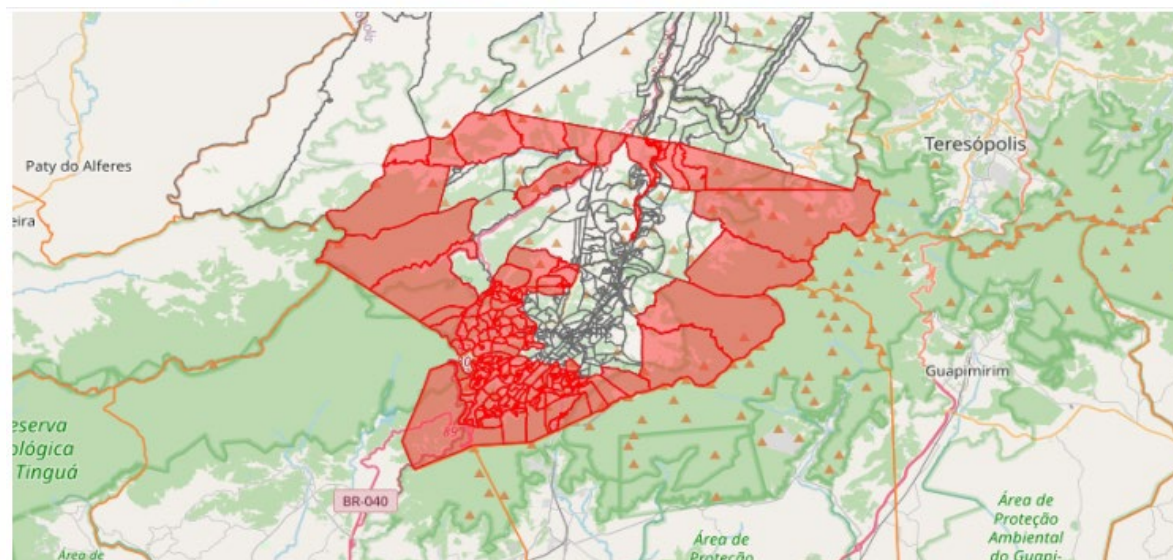
COBRADE	Denominação (Tipo ou Subtipo)	Dia	Mês	Ano	Horário
12200	Enxurradas	11	03	2021	12:00

### 3. Data da ocorrência do desastre

### 4. Área com população afetada

Área com população afetada/Tipo de ocupação	Não existe/ Não afetada	Urbana	Rural	Urbana e rural
Residencial		X		
Comercial		X		
Industrial	X			
Agrícola	X			
Pecuária	X			
Extrativismo Vegetal	X			
Reserva florestal ou APA	X			
Mineração	X			
Turismo e outras	X			

### Seleção das áreas com população afetada











# Disaster Information Form (FIDE)

## Damages and losses reports (FIDE) Emergency situation declaration

Data were collected until 17:00 on 02/16/2022 which were complemented and/or updated as the scenario evolved.

50 areas have been affected from more than 5,000 landslides and flashfloods

-  • Identification
-  • Disaster Classification
-  • Date
-  • Area with affected population
-  • Causes and effects of the disaster
-  • Human, material and environmental damages
-  • Public and private economic losses
-  • Reporting Institution

# Petropolis

## Disaster-first data recorded in S2ID

6. DANOS HUMANOS, MATERIAIS OU AMBIENTAIS			
6.1 DANOS HUMANOS Informar a quantidade de mortos, feridos, enfermos, desabrigados, desalojados, desaparecidos e outras pessoas que foram diretamente afetadas pelo desastre, desde que necessitem de auxílio do poder público ou cujos bens materiais tenham sido danificados /destruídos.	Discriminação		Quantidade
	<b>Mortos</b>	Pessoas que perderam suas vidas em decorrência direta dos efeitos do desastre.	78
	<b>Feridos</b>	Pessoas que sofreram lesões em decorrência direta dos efeitos do desastre e necessitam de intervenção médico-hospitalar, materiais e insumos de saúde (medicamentos, médicos, etc.).	350
	<b>Enfermos</b>	Pessoas que desenvolveram processos patológicos em decorrência direta dos efeitos do desastre.	200
	<b>Desabrigados</b>	Pessoas que necessitam de abrigo público, como habitação temporária, em função de danos ou ameaça de danos causados em decorrência direta dos efeitos do desastre.	450
	<b>Desalojados</b>	Pessoas que, em decorrência dos efeitos diretos do desastre, desocuparam seus domicílios, mas não necessitam de abrigo público.	0
	<b>Desaparecidos</b>	Pessoas que necessitam ser encontradas, pois, em decorrência direta dos efeitos do desastre, estão em situação de risco de morte iminente e em locais inseguros/perigosos.	200
	<b>Outros afetados</b>	Pessoas afetadas diretamente pelo desastre (excetuando as já informadas acima)	120.000
<b>TOTAL DE AFETADOS</b>		<b>121.278</b>	

**Human Impacts** (deaths, injured, hospitalized, displaced and missing persons) – **more than 120,000 people directly affected** by the disaster.

# Petropolis

## Disaster-first data recorded in S2ID

7. PREJUÍZOS ECONÔMICOS PÚBLICOS E PRIVADOS	
<b>7.1 PREJUÍZOS ECONÔMICOS PÚBLICOS</b> Informar o valor estimado de prejuízos econômicos públicos relacionados com os serviços essenciais prejudicados.	<b>Valor total do prejuízo econômico (setor público)</b> <b>R\$ 25.408.000,00</b>
<b>Serviço essencial prejudicado</b> Serviço essencial público prejudicado ou interrompido.	<b>Valor do prejuízo (R\$)</b>
Assistência médica, saúde pública e atendimento de emergências médicas	950.000,00
Abastecimento de água potável	1.250.000,00
Esgoto de águas pluviais e sistema de esgotos sanitários	4.850.000,00
Sistema de limpeza urbana e de recolhimento e destinação do lixo	2.450.000,00
Sistema de desinfestação/desinfecção do habitat/controle de pragas e vetores	450.000,00
Geração e distribuição de energia elétrica	2.250.000,00
Telecomunicações	458.000,00
Transportes locais, regionais e de longo curso	8.500.000,00
Distribuição de combustíveis, especialmente os de uso doméstico	750.000,00
Segurança pública	0,00
Ensino	3.500.000,00

**Economic Losses – Private Sector** (agriculture, commerce, industry and services) – USD 20 million

## Early Response Actions

- 02/16 – Disaster occurrence, Public Calamity declaration by Petropolis and Federal recognition request received
- 02/17 – Sedec **recognized** the Municipal Declaration
- 02/17 - Submission of the 1st **response actions resources request** (Humanitarian Assistance) in the amount of USD 320,000.00 to Sedec
- 02/17 – Civil Defense Payment Card (CPDC) **account activated** – CPDC (Sedec)
- 02/18 – Credit available to municipality for the early response actions (**3 days after disaster strikes**)

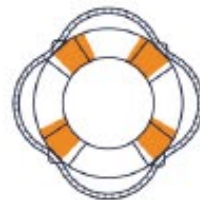
## Tipo de Solicitação

Selecione o tipo de solicitação

Kits de assistência humanitária

Recursos para Ações de Assistência

Recursos para Ações de Restabelecimento



## Atualização de dados humanos (pessoas)

Desabrigados nº

Desalojados nº

Afetados nº

Pessoas que necessitam de abrigo público, como habitação temporária, em função de danos ou ameaça de danos diretamente causados pelo desastre.

Pessoas que, em decorrência dos efeitos diretos do desastre, precisaram desocupar seus domicílios, mas não necessitam de abrigo público.

Pessoas afetadas diretamente pelo desastre e que necessitam de intervenção pública para ações de resposta (excetuando os já contabilizados ao lado). Ex.: desaparecidos, isolados, enfermos, feridos, vítimas fatais, etc.

950

1500

120000

## Descrição das metas e itens

Meta 1

Aquisição de óleo diesel

Desde o início da estiagem, agora já com dois decretos renovados, o município está continuamente transportando água para famílias necessitadas e que passam por grande escassez em relação ao consumo humano e, principalmente, à dessedentação animal. Com caminhões e tratores tanque foi transportado em torno de 200.000 (duzentos mil) litros de água em um período de 175 (cento e setenta e cinco) dias, causando um gasto de quase quatro mil litros de óleo diesel, somando mais de R\$ 18 mil de despesas ao município.

Pessoas diretamente beneficiadas

Período de execução (em dias)

Valor total da meta 1

90

175

R\$ 18.116,73

Item

Qtde.

Unid.

Período de execução (em dias)

Valor unitário (R\$)

Valor total do item

1

Óleo Diesel para caminhões e tratores tanque para transporte de água às famílias afetadas.

Aquisição

3947

LITRO

175

4.59

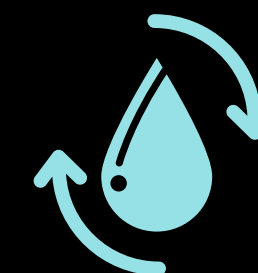
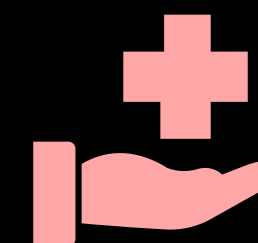
R\$ 18.116,73

Valor Total

R\$ 18.116,73

## Response and Rehabilitation request form

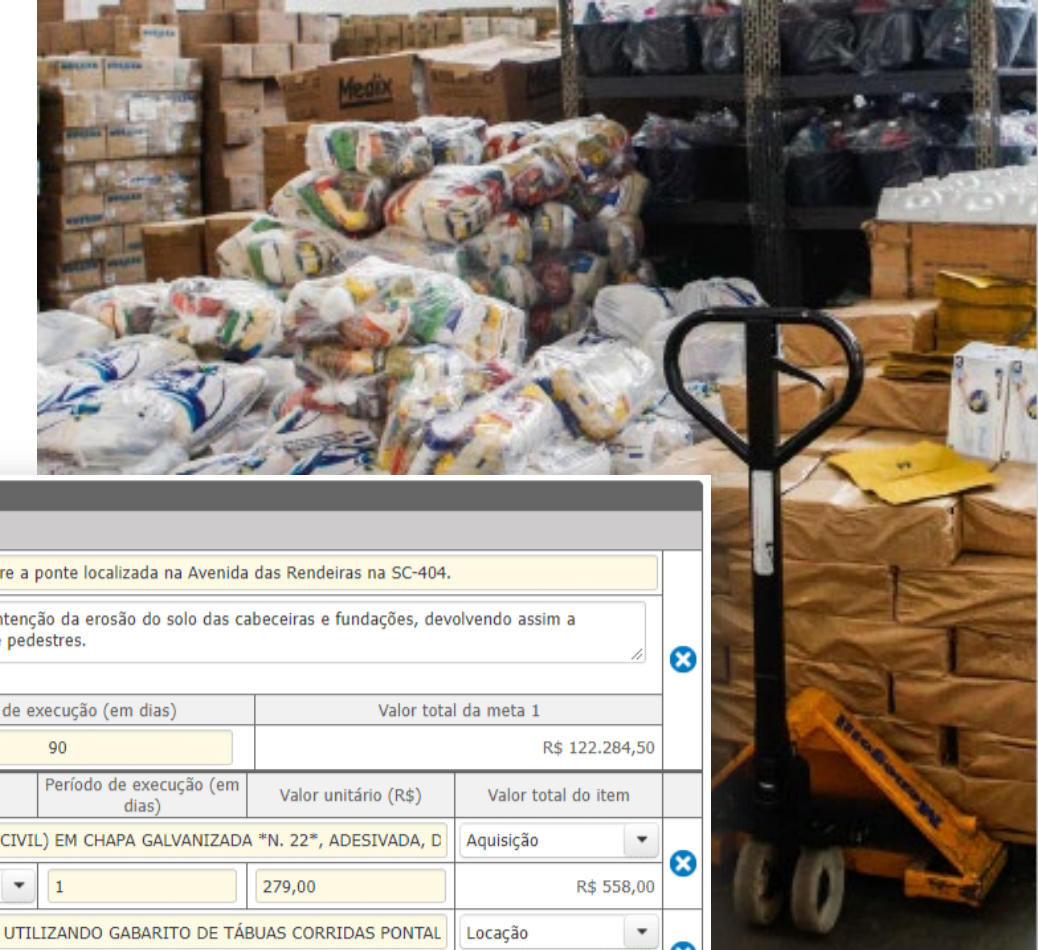
- Humanitarian Assistance
- Shelter
- Rehabilitation of Essential Public Services (Electricity, water, transport)
- Cleaning of roads and roads
- Rehabilitation of schools and hospitals
- Temporary works that do not need complex design
- Etc.



# Petropolis

## Response and Rehabilitation request form

- **BRL 2,759,470.25** for Humanitarian Assistance :  
Food, mattress, hygiene items and vehicles for debris removal and cleaning.



1. Formulário de Solicitação de Recursos 2. Dados Bancários 3. Modelos

### SISTEMA NACIONAL DE PROTEÇÃO E DEFESA CIVIL - SINPDEC

DEFESA CIVIL BRASIL

## Formulário de Solicitação de Recursos Federais v1

UF: SC MUNICÍPIO: Florianópolis SIMBOLOGIA:

DESASTRE: Alagamentos DATA DA OCORRÊNCIA: 03/12/2020

TIPO DE SOLICITAÇÃO

Recursos para Ações de Restabelecimento

Selecione o tipo de solicitação

Kits de Assistência Humanitária - Desabilitado Temporariamente

Recursos para Ações de Assistência

**Recursos para Ações de Restabelecimento**

ameaça de danos diretamente causados pelo desastre.	desastre, precisaram desocupar seus domicílios, mas não necessitam de abrigo público.	resposta (excetuando os já contabilizados no IADU). Ex.: desaparecidos, isolados, enfermos, feridos, vítimas fatais, etc.
---	---	---

Item	Qtde.	Unid.	Período de execução (em dias)	Valor unitário (R\$)	Valor total do item
<b>Meta 1:</b> Restabelecimento das condições de segurança à trafegabilidade sobre a ponte localizada na Avenida das Rendeiras na SC-404.					
Necessidade de execução de cortina em concreto armado para contenção da erosão do solo das cabeceiras e fundações, devolvendo assim a estabilidade para a ponte e segurança para o tráfego de veículos e pedestres.					
Caracteres restantes: <b>1000</b>					
Pessoas diretamente beneficiadas		Período de execução (em dias)		Valor total da meta 1	
3000		90		R\$ 122.284,50	
1	2,00	METRO QUADRADO	1	279,00	R\$ 558,00
2	72,00	METRO QUADRADO	90	64,85	R\$ 4.669,20
3	64,00	HORA/MÁQUINA	30	227,36	R\$ 14.551,04
4	140,00	METRO CÚBICO	30	1,73	R\$ 242,20
5	261,00	METRO QUADRADO	20	130,47	R\$ 34.052,67
6	117,00	METRO CÚBICO	60	558,07	R\$ 65.294,19
7	120,00	METRO CÚBICO	20	22,58	R\$ 2.709,60
8	120	METRO CÚBICO	20	1,73	R\$ 207,60
<b>VALOR TOTAL</b>					<b>R\$ 122.284,50</b>

<b>Cestas Básicas para Afetados</b>						
Tendo em vista o desastre ocorrido no município, diversas residências foram atingidas fazendo com que os habitantes perdessem seus víveres, fazendo necessário a garantia alimentar. Trata-se de levantamento parcial dos danos humanos.						
Pessoas diretamente beneficiadas		Período de execução (em dias)		Valor total da meta 1		
3200		60		R\$ 304.000,00		
Item	Qtde.	Unid.	Período de execução (em dias)	Valor unitário	Valor total do item	
1	1	Cesta Básica				Aquisição
	1600	KIT	60	R\$ 190,00	R\$ 304.000,00	

# Petropolis

## Emergency services and temporary works that do not need complex design

- **BRL 26.886.629,26** for rehabilitation (69 items):
  - Urban cleaning: clearing streets, cleaning channels and drainage
  - Temporary bridges
  - Services for Urban Cleaning and Clearing of Channels
  - Houses demolition (133)
  - Electricity and water supply
  - Cleaning of small rivers and streams



### Recuperação de Via Pública - Rua Salvador da Costa Alves (Mosela)

As chuvas ocorridas nos dias 15 de fevereiro e 20 de março, entre as inúmeras vítimas do desastre, comprometeram a via em questão, em virtude de processo erosivo. Dessa forma, é imperativa a realização de muro de contenção a fim de reestabelecer a normalidade da mobilidade urbana e a segurança de transeuntes e veículos.

Pessoas diretamente beneficiadas		Período de execução (em dias)		Valor total da meta 1	
3000		180		R\$ 145.278,28	
Item	Qtde.	Unid.	Período de execução (em dias)	Valor unitário	Valor total do item
1	Recuperação de via pública com execução de cortina atirantada (15,00 x 2,50)				
	37	M2	180	R\$ 3.926,44	R\$ 145.278,28



# Reconstruction Plan



## Tipo da meta

Selecione o tipo da meta

Infraestrutura Pública

Unidade Habitacional



## 3. Objeto

### Descrição

Obra de contenção de Talude tipo Gabião para estabilização de encosta com risco de desabamento.

Desastre

Data da ocorrência

Portaria de Reconhecimento

Alagamentos

03/12/2020

123 (03/12/2020)

## 4. Descrição Sumária das Metas

### Identificação

### Grupo/Subgrupo

Obra de contenção para estabilização de encosta

Obras para estabilização

Relatório  
Diagnóstico

Quantidade

Unidade

Valor total (R\$)

Muro de Arrimo em Gabião

384

M2

344.635,48

Localização

Valor Total

R\$344.635,48

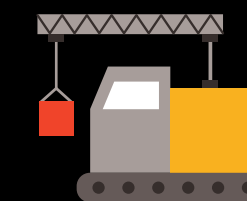
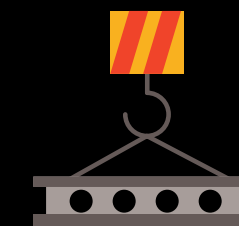
27° 36' 00" S

48° 29' 11" S



# Work Plan for Infrastructure Reconstruction

- Infrastructure repair and reconstruction
- Public buildings recovery
- Roads and bridges recovery
- Construction of new structures to protect affected areas, such as walls to protect slopes, recovery of riverbanks, etc.
- New housing settlements, in specific cases according to Housing Law.





# Petropolis

## Reconstruction



- **BRL 5.442.643,77** for Reconstruction (16 itens):  
Roads recovery with concretes walls to stabilize slopes

Descrição	Grupo/Subgrupo	Localização			
1 - Recomposição de Via Pública com execução em cortina atirantada na Estrada Do Jurua, S/Nº (Loteamento Nossa Senhora de Fátima) - Posse (35,00 m x 6,20)	OBRAS PARA ESTABILIZAÇÃO DE ENCOSTAS CORTINA ANCORADA (ATIRANTADA)	22º 15' 53" S	43º 04' 27" O		
Valor solicitação / Valor empenho (R\$)	Proposta vencedora (R\$)	Variação em R\$	Variação (%)	Quantidade	R\$ / Unidade
739.709,56	797.426,26	+57.716,70	+8%	217	3.674,78

- Total release **BRL 34.649.479,98**
- 3 items requested are still under analysis in a total of **BRL 21.576.872,52**



**05**

**Lessons Learned**

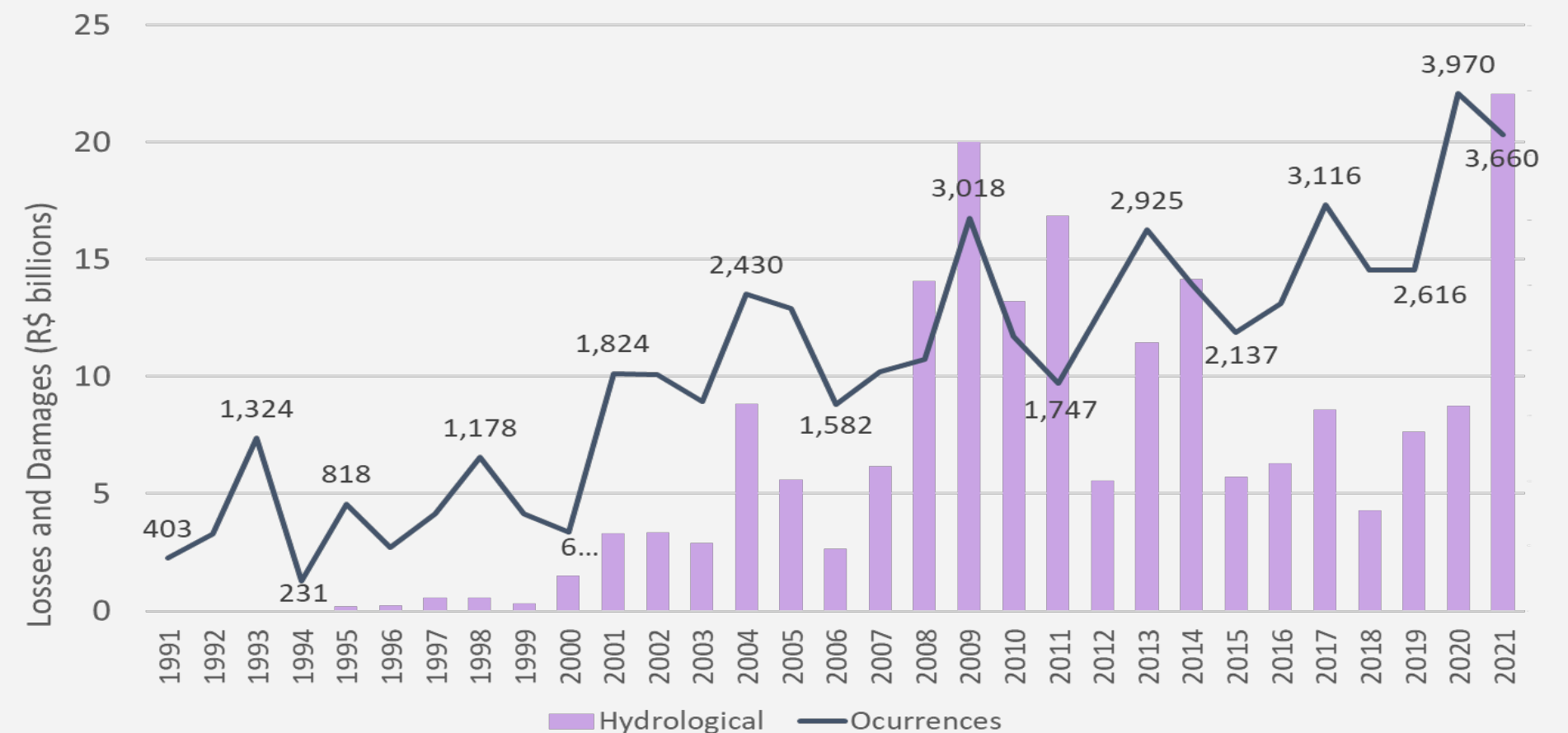
# Rio de Janeiro | 2011

## The Disaster that changed Brazil's DRM

### "Região Serrana do Rio de Janeiro (2011)"

The events of January 11<sup>th</sup>, 2011, in Rio de Janeiro State are recognized as the worst disasters in the history of the country. Heavy rains affected 16 municipalities in the mountainous region, resulting in 1.192 deaths.

In addition, two more significant disasters that occurred in Santa Catarina State (2008) and Pernambuco State (2011), this disaster triggered a series of structural changes in the last decade on the DRM agenda in Brazil.



## Majors actions from lessons learned

- Legal Framework
- Comprehensive disaster risk mapping and risk assessments performed by the Federal Government and State and Municipal institutions
- Development and deployment of S2ID (2011 – 2016)
- Publishing the Natural Disasters Digital Atlas as compedium of data to be used for analytics and decision making
- Establishment of Cenad and Cemaden
- Civil Defense Payment Card

# LEGAL FRAMEWORKS



# Risk Assessment

Geological Survey of Brazil (CPRM)



1. Hazard Maps: cartographic documents that represent the event probability related to the landslides and floods;
2. Hydrological-prone risk areas maps: cartographic reports that quantify the elements at risk located in known risk areas. 1,600 municipalities and over 10 thousand mapping areas.

# S2ID

	BEFORE (S2ID)	AFTER (S2iD)
Federal Recognition	90 days average	5 days average
Documents	Paper reports without standards	Digital on line reports with standard information
Resources release to subnational	Up to 4 years	180 days average
Historical Data	Paper reports	Database
Accountability	High disapproval rating	Simplified process with constant monitoring

# Natural Disasters Digital Atlas

The Atlas' main objective is to provide systematized disasters and related damages and losses.

The data source is the S2ID and historical data prior to the system, gathered from various sources. A total of **90,122 disasters records** from **1991 to 2021** were collected and analyzed. Atlas shows data through graphic and spatial.

The screenshot displays the Atlas Digital interface, which includes a navigation menu, a search bar, and a main dashboard. The dashboard features a map of Brazil with a data popup for Resende, a summary of key statistics, and two bar charts showing annual and monthly disaster occurrences.

**Atlas Digital | Atlas digital**

Mapa interativo | Dashboard | Como utilizar | Sobre o projeto | Institucional

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**RESENDE**

- Ocorrências: 7
- Óbitos: 1
- Desabrigados/Desalojados: 2.362
- Total de Afetados: 58.267
- Danos: 8.257.710,665
- Prejuízos: 31.556.244,667

**Estadual**

- Estado: Todos
- Grupo de desastres: Todos
- Tipologia: Todos

**248 Mi** Danos humanos totais

**66,54 Bi** Danos totais

**266,81 Bi** Prejuízos totais

**58,88 Mil** Ocorrências

**4065** Óbitos

**7 Mi** Desabrigados e desalojados

**Ocorrências por ano**

Ano	Ocorrências
1991	0,5 Mil
1992	0,5 Mil
1993	1,2 Mil
1994	0,2 Mil
1995	0,8 Mil
1996	0,5 Mil
1997	0,7 Mil
1998	1,1 Mil
1999	0,7 Mil
2000	0,6 Mil
2001	1,9 Mil
2002	2,0 Mil
2003	1,8 Mil
2004	2,4 Mil
2005	2,4 Mil
2006	1,7 Mil
2007	2,0 Mil
2008	2,0 Mil
2009	3,1 Mil
2010	2,2 Mil
2011	1,7 Mil
2012	2,4 Mil
2013	4,2 Mil
2014	3,2 Mil
2015	2,6 Mil
2016	3,1 Mil
2017	4,3 Mil
2018	3,6 Mil
2019	3,5 Mil

**Ocorrências por mês**

Mês	Ocorrências
jan	7,5 Mil
fev	5,5 Mil
mar	6,2 Mil
abr	5,8 Mil
mai	5,2 Mil
jun	3,5 Mil
jul	3,0 Mil
ago	3,0 Mil
set	4,8 Mil
out	5,2 Mil
nov	3,8 Mil
dez	4,2 Mil





## Civil Defense Payment Card

## Civil Defense Payment Card



- Municipalities have a previously registered bank account.
- When a disaster happens, the account is activated by the Federal Government at the Public Bank and the Mayor only has to sign a document.
- It can only be used for relief, assistance and rehabilitation actions.
- Withdrawals are not allowed.
- Spending can be monitored in real time by the control authorities.

### Why?

- Expenses with purchases of smaller items are difficult to trace and with little transparency, making accountability problematic.
- Time for effective transfers between the Federal Government and Subnational has significantly reduced.

## Still challenges

- Lack of local capacity:
  - to implement disaster risk mitigation works
  - to implement reconstruction projects with build back better principles
  - to promote improved and comprehensive disaster prevention programs
- Resettlement of population in high-risk areas
- Land title issues and occupation of non-regulated areas
- Lack of Disaster Risk Finance and Insurance programs (*refer to the WB study on Brazil's DRFI*)

# Thank You!

Feel free to contact us if you have any questions.

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