

Toronto's Digital Infrastructure Plan: Bias, Discrimination and Indigenous Data Governance Considerations

Presentation to Toronto Aboriginal Affairs Advisory Committee
Connected Community, Technology Services Division





Outline

- About the Digital Infrastructure Plan (DIP)
- Bias, discrimination and data governance considerations
- Public consultations

What is a Connected Community?

A 'Connected Community' empowers a city to use processes, tools, data, and technology to optimize resources and enhance the quality, accessibility and performance of urban services, increase economic competitiveness, and engage residents, businesses and visitors more effectively.

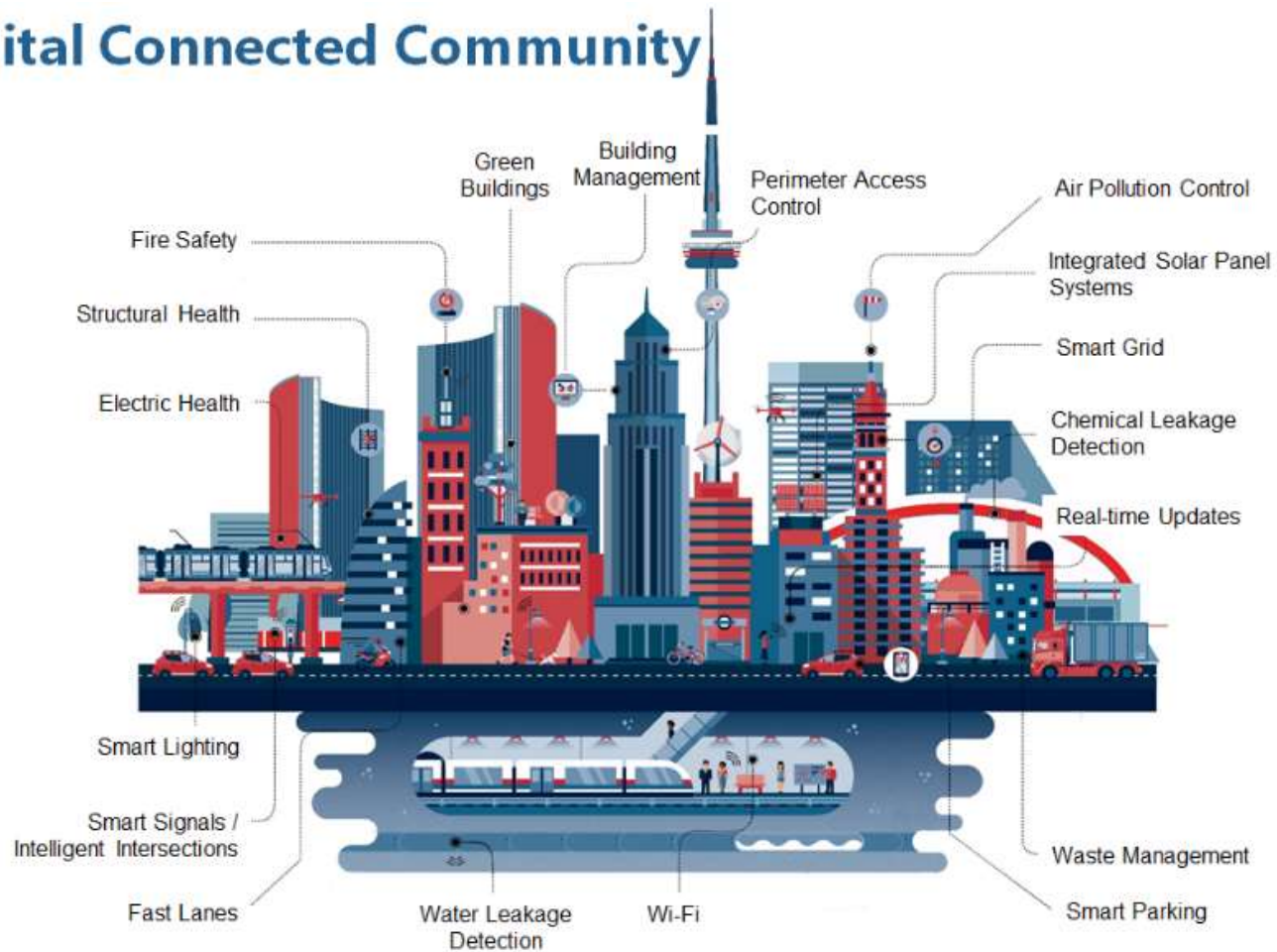
This approach leads to greater use of digital infrastructure.



Digital Transformation

- Digital infrastructure is changing the way we access information, work, and connect with each other.
- Digitized municipal services are leading to increased efficiencies, improved decision-making and the better management of public assets as well as issues like privacy, security and equity.
- As the use of digital technologies increases, the City is developing a **Digital Infrastructure Plan.**

A Digital Connected Community



What is digital infrastructure?

Digital infrastructure means infrastructure that creates, exchanges or uses data or information as a part of its operation.

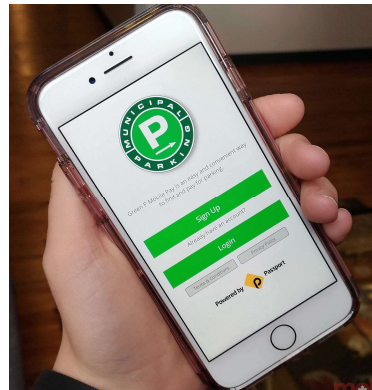
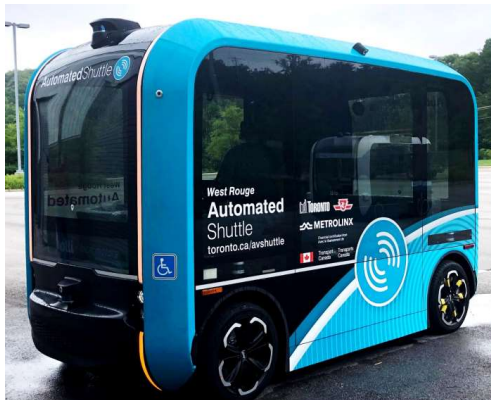
Digital infrastructure includes physical structures, cabling and network systems, software systems, data standards and protocols.

Examples:

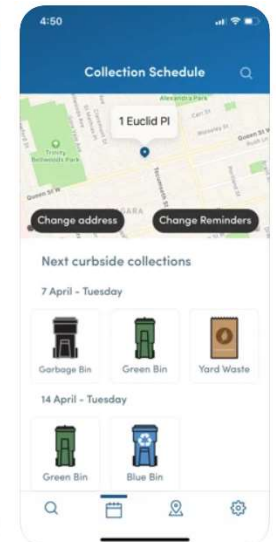
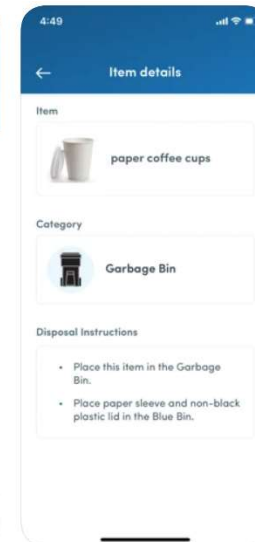
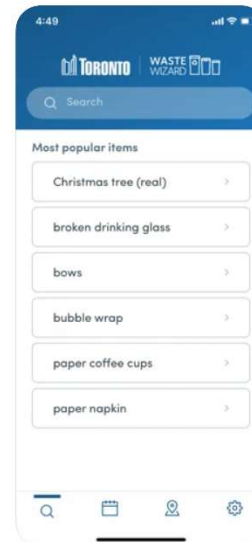
- sensors (e.g. cameras, GPS sensors, microphones, etc.),
- broadband and telephone networks,
- Wi-Fi,
- Apps,
- open data standards, etc.



Digital Infrastructure Examples



TOwaste – City of Toronto
 City of Toronto
 Designed for iPad
 #115 in Reference
 ★★★★★ 3.3 • 74 Ratings
 Free



How does this impact me?

Digital Infrastructure can:



Help create a society that supports **equitable**, **accessible** and **inclusive** benefits for social, community, economic or environmental **prosperity**.



Increase risk of potential **cyberattacks** and disruption of critical systems; potential **privacy** and **security** risk to individuals; and can lead to **harmful impacts** on some communities

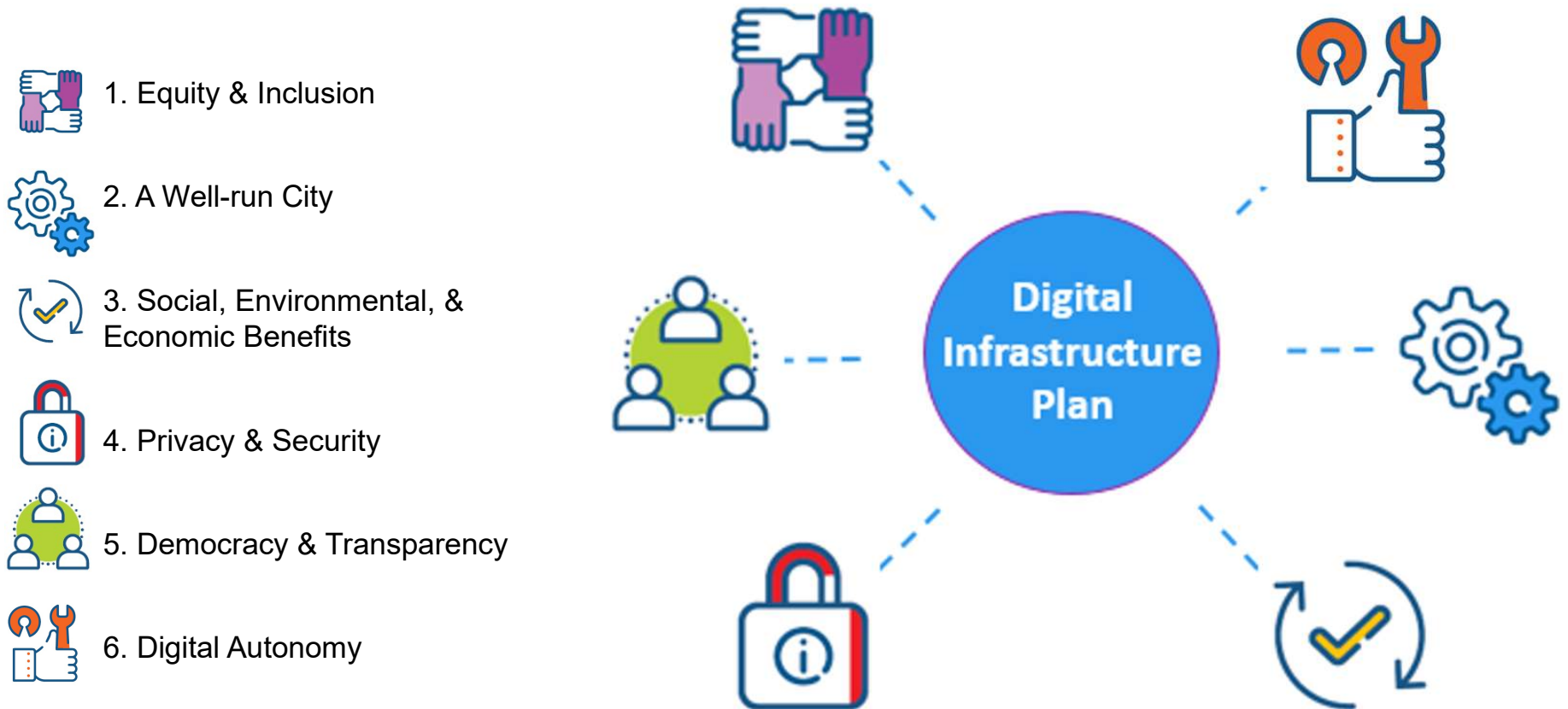


What is the Digital Infrastructure Plan?

Responding to Opportunities & Challenges

- DIP will guide decision-making associated with increased use of digital infrastructure
- In addition to existing policies and standards, guidance is needed on:
 - Digital rights
 - Equity, bias, and discrimination considerations
 - Consent and the collection of youth data
 - When and how to engage the public
- Formalized governance, including Indigenous Data Governance

Digital Infrastructure Plan Principles



Organization of the Plan

The Plan is organized by Principle, which are followed by:

1. Vision Statement
2. Descriptive text
3. Policy Areas
4. Policy Statements

2. Principle: Equity and Inclusion



VISION: Digital infrastructure will be used to create and sustain equity, inclusion, accessibility, and human rights in its operations and outcomes. Digital infrastructure will be flexible, adaptable and responsive to the needs of all Torontonians, including equity-deserving groups, Indigenous People, those with accessibility needs, and vulnerable populations.

This principle describes how Toronto will ensure that people can enjoy their rights and freedoms, and feel safe and secure online when accessing the City services, systems, and products and services they interact with or choose to use. All residents and visitors are entitled to be treated with respect and fairness, benefitting from digital services and opportunities without discrimination. This principle reflects the City's motto "Diversity, Our Strength" in the development and use of digital infrastructure.

2.1. Policy Area: Equity, Inclusion and Human Rights

Identifying and removing systemic barriers to the full participation of diverse communities is key to creating equitable access to opportunities and benefits for residents and visitors in the digital realm.

Under the Ontario Human Rights Code, every person has a right to equal treatment in the provision of services and facilities, occupation of accommodation, contracts and in employment. In keeping with these core foundations, the City will strive to design digital infrastructure using an equity lens with the goal of fostering inclusion and addressing and removing systemic barriers, bias, discrimination and existing inequities.

It is also important to recognize that some residents, including undocumented individuals, may be hesitant or unwilling to use digital infrastructure and digital services for a variety of reasons, including if it requires them to provide personal information.

Policy Statements

The City will:

- Build digital infrastructure using equity as a lens, emphasizing human dignity, human rights, and shared ethical values.
- Address systemic barriers to enable the full participation of Toronto's diverse communities in the digital realm



Equity and Inclusion

19 Policy
Statements

Vision Statement

Digital infrastructure will be used to create and sustain equity, inclusion, accessibility, and human rights in its operations and outcomes.

Digital infrastructure will be flexible, adaptable and responsive to the needs of all Torontonians, including Indigenous, Black, equity-deserving groups, and those with accessibility needs.

Policy Areas

1. Equity, Inclusion, & Human Rights
2. Accessible Digital Infrastructure
3. Responsive Digital Infrastructure



Sample policy statements

The City will:

- Identify and **address systemic barriers** that restrict the full participation of Toronto's diverse communities in the digital realm
- Ensure that safeguards are in place to **detect, prevent, and remedy discrimination and inequity** that could arise through the use of digital infrastructure
- Ensure that communities facing systemic barriers and discrimination have **access to affordable high speed internet** connectivity and internet-enabled devices
- Provide support to **improve residents' digital literacy**, awareness, skills and reinforce their ability to act and make informed decisions in the digital realm
- Ensure that **continued access to non-digital public services** remains available to people who cannot or choose not to access digital services



A Well-run City

**22 Policy
Statements**

Vision Statement

Digital Infrastructure will enable high quality, resilient and innovative public services, and support the use of data and evidence to inform decision-making.

Policy Areas

1. Digital Transformation
2. Data Governance
3. Digital Literacy & Adoption
4. Asset Management
5. Toronto Public Service as a Connected Community



Social, Economic, and Environmental Benefits

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Statements

Vision Statement

Digital Infrastructure will contribute to positive social, economic and environmental benefits by supporting the success of Toronto's residents, businesses, academic institutions and community organizations.

Policy Areas

1. Social Benefits
2. Economic Benefits
3. Environmental Benefits



Privacy and Security

**20 Policy
Statements**

Vision Statement

Toronto's Digital Infrastructure will operate in a way that protects the privacy of individuals in accordance with legislative requirements, and be safe from misuse, hacks, theft or breaches.

Policy Areas

1. Security
2. Privacy
3. Consent
4. Digital Identity



Democracy & Transparency

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Statements

Vision Statement

Decisions about Digital Infrastructure will be made democratically, in a way that is ethical, accountable, transparent and subject to oversight.

Torontonians will be provided with understandable, timely, and accurate information about the technologies in their city, and opportunities to shape the digital domain.

Policy Areas

1. Public Engagement
2. Access to Information - Transparency
3. Open Contracting
4. Trust in Digital Government
5. Algorithmic Transparency & Responsibility



Sample policy statements

The City will:

- Ensure that residents can **easily access and understand information** about the City's digital infrastructure: how it operates, and why the decision was made to support its deployment
- Ensure the City's **procurement processes is fair, open and transparent** including the use of open contracting methods
- Foster responsible, accountable and human-centred development and use of **transparent and explainable AI**.
- **Develop a public AI registry**, providing understandable and up-to-date information about how algorithms are used, and how residents may interact with them
- Establish data governance mechanisms to provide **appropriate levels of oversight (including human, if necessary) over AI systems**



Digital Autonomy

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Statements

Vision Statement

The City will maintain control in the selection, use and design of its digital infrastructure, so that it – and its residents - can act with autonomy and in a self-determined manner within the digital realm.

Policy Areas

1. Open Source
2. Intellectual Property
3. Open Standards & Interoperability
4. Data Residency in Canada
5. Maintenance & Repair
6. Control



Sample policy statements

The City will:

- Institute mechanisms that **help residents understand and better control the use of their information**

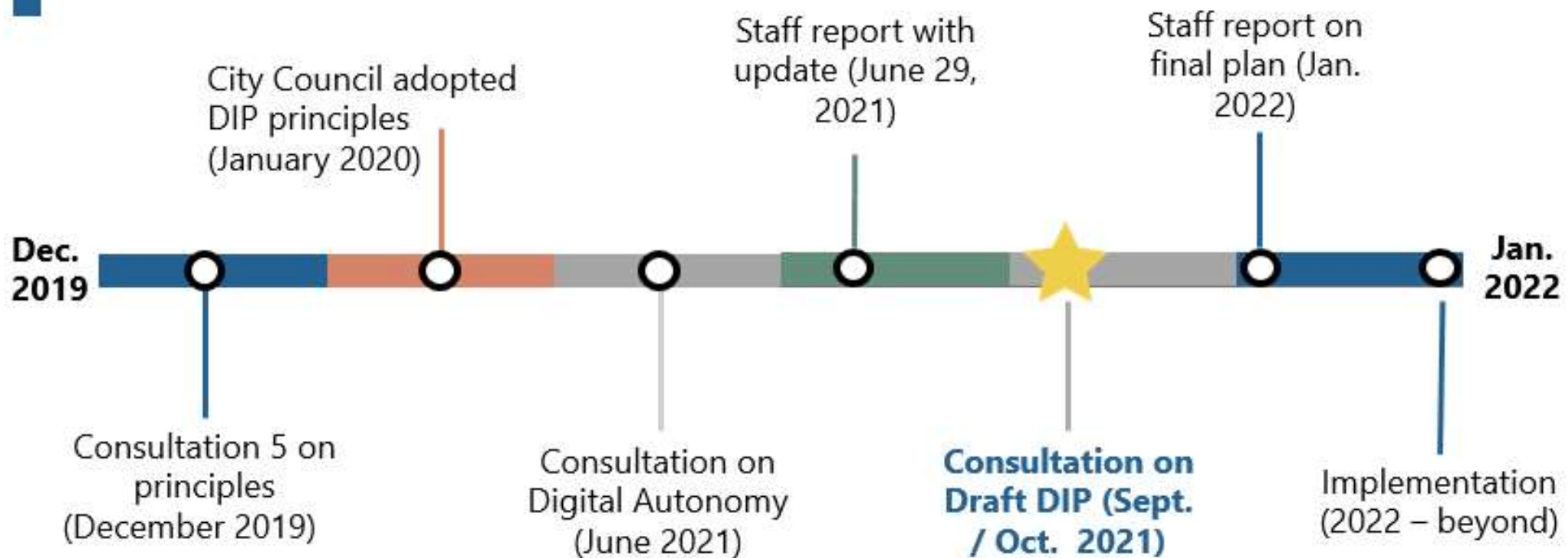
Work to come:

- Consultations with First Nations communities to define Indigenous Data Governance as a parallel DIP governance strategy
- This will include how to integrate **OCAP® principles** into the DIP
- OCAP® respects that rights of First Nations communities to own, control, access, and possess information about their peoples is fundamentally tied to self-determination and to the preservation and development of their culture.

Consultation & Engagement

- Toronto Accessibility Advisory Committee (Sept. 2)
- Confronting Anti-Black Racism Advisory Committee (Sept. 24)
- 2SLGBTQ Advisory Committee (Sept. 27)
- Public Meeting #1 (Sept. 28, 6-8pm)
- Public Meeting #2 (Sept. 29, 3-5pm)
- CC4DR Workshop (Oct. 7)
- Drop-in Working Sessions (Oct. 4 – Oct. 13)
- Inter-divisional engagement (ongoing)

Roadmap





Discussion

- How can we build upon the policy statements to ensure issues of equity, bias and discrimination are appropriately addressed?
- What elements should be considered as we develop a Digital Equity policy?
- Are there key groups or organizations we should meet as we examine how to integrate the OCAP® principles into the DIP?