Applying the **Neurodivergent Scale for Interacting with Robots (NSIR)** to the **Principles of the Accessible Canada Act (ACA, 2019)** allows organizations to move from general accessibility to "neuro-inclusive" design. The ACA's purpose is to realize a "Canada without barriers" by 2040 through seven priority areas, including technology and service delivery.

By integrating the NSIR, you can operationalize the Act's high-level principles to ensure robotic systems are developed with the specific needs of neurodivergent Canadians in mind.

1. Principle: "Dignity" and "Autonomy"

The ACA mandates that everyone must be treated with dignity and have the freedom to make their own choices.

- **Radical Privacy:** Use **NSIR Item 7** (*"I feel comfortable undressing in front of my robot"*) to evaluate if a robot's design respects the user's dignity in sensitive environments like home care.
- **Consent and Choice:** Align **NSIR Item 8** (*"My robot is the same with me as it is with anyone"*) with the principle of autonomy. A robot that is predictable and consistent allows a neurodivergent user to make informed choices about their interaction without fear of social judgment or "hidden" behaviors.

2. Principle: "Involving Persons with Disabilities" (Nothing Without Us)

A core principle of the ACA is that persons with disabilities must be involved in the design and development of laws, programs, and services.

- **Co-Design Metrics:** When consulting with neurodivergent individuals on new robotic technologies, use the NSIR as a framework for their feedback. For example, instead of asking if a robot is "friendly," ask participants to rate **NSIR Item 3** (*"I think I can share my thinking with the robot without speaking"*) to measure how well the technology supports non-verbal cognitive styles.

3. Principle: "Barrier-Free Access" and "Meaningful Options"

The Act aims to identify, remove, and prevent barriers in technology and communication.

- **Technological Barrier Removal:** The NSIR identifies "attitudinal" and "technological" barriers specifically for neurodivergent populations. If a robot's social cues are too complex or "human-like" (high SOAS score), it may create a barrier. High scores on **NSIR Item 2** (*"Sometimes I stare at the robot"*) can indicate a "barrier-free" engagement where the user feels comfortable processing the robot's presence at their own pace.
- **Equivalent Options:** In line with ACA's "meaningful options," the NSIR's **Anthropomorphic Connection**subscale helps determine if a robot provides a valid social "option" that meets a user's kinship needs (Item 1) better than traditional human-led services might.

4. Principle: "Intersecting Forms of Marginalization"

The ACA requires that services take into account how different forms of discrimination intersect.

- **Inclusive Data and Surveillance:** In the procurement of AI and robotic systems, the NSIR can be used to monitor for "statistical discrimination" against neurodivergent individuals. For example, measuring **Social Comfort/Trust Safety** (NSIR Factor) ensures that the robot is not just "accessible" by standard physical measures, but is psychologically safe for users who face sensory or social processing challenges.

Application Strategy Table

ACA Principle	NSIR Application Item	Practical Goal
Dignity	**Item 7:** Comfort in private moments.	Ensure robots do not infringe on radical privacy in care.
Autonomy & Choice	**Item 8:** Predictability of the robot.	Reduce social anxiety through consistent machine behavior.
Involvement	**Item 6:** Naming the robot.	Measure the user's emotional "ownership" and bond with the tool.
Barrier-Free Access	**Item 3:** Non-verbal sharing.	Remove the "communication barrier" often present in human interaction.
Highest Level of Accessibility	**Factor:** Social Comfort/Trust Safety.	Aim for "neuro-accessible" standards in federal procurement.

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By applying the NSIR to the **Principles of the Accessible Canada Act**, organizations can ensure that "barrier-free" includes the removal of cognitive and social barriers, fostering a Canada where technology serves everyone with equal dignity.