The Common Impact Data Standard:
Alignment Tiers by class and property for software developers

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Ontology URL: http://ontology.eil.utoronto.ca/cids/cids.owl
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Summary of Alignment Tiers

Embarking:

The logo with the **dotted green ring** indicates that the software can send and receive impact data using the Common Approach Impact Data Standard JSON-LD expressions to capture the most basic level of impact data:

- Organization (Legal name, Org ID)
- Outcome (name, description, domain)
- Indicator (name, description)
- IndicatorReport (all)

Building:

The logo with the **dashed green ring** indicates that the software can send and receive impact data using the Common Approach Impact Data Standard JSON-LD expressions at a level of impact data that is in full alignement with the Impact Management Project:

All the above plus:
- Stakeholder (description, location, characteristics)
- Outcome (StakeholderImportance, Underserved, ImpactRisk)
- IndicatorReport (value, date, baseline, contribution)
- Impact Report (Scale, Depth, Duration)

Fully aligned:

The logo with the **solid green ring** indicates that the software can send and receive impact data using the Common Approach Impact Data Standard JSON-LD expressions at a level of impact data that is in full alignement with the Impact Management Project as well as impact models (such as theory of change) and characteristics of data quality.
All the above plus:
- ImpactModel (all)
- IndicatorReport (method, data quality)
- ImpactReport (method, data quality)

Class	Property	Value Restriction	Adoption Tiers		
			Embarking	Buidling	Aligned
Organization	rdfs:subClassOf	org:Organization	Y	Y	Y
org:Organization	org:hasID	only org:OrganizationID		Y	Y
	org:hasLegalName	exactly 1 xsd:string	Y	Y	Y
	useOfFunds	only xsd:string			Y
	hasImpactModel	only ImpactModel			Y
	hasContact	only cids:Person			Y
	sch:description	exactly 1 xsd:string			Y
	sch:dateCreated	exactly 1 xsd:dateTime			Y
org:OrganizationID	org:issuedBy	org:Organization		Y	Y
	sch:identifier	exactly 1 xsd:string		Y	Y
	sch:dateCreated	exactly 1 xsd:dateTime		Y	Y
Outcome	hasStakeholderOutcome	only StakeholderOutcome		Y	Y
	forDomain	only Domain	Y	Y	Y
	hasIndicator	only Indicator	Y	Y	Y
	canEnable	only (Service or Activity)			Y
	canProduce	only Outcome			Y
	i72:located_in	only i72:Feature			Y
	hasImpactRisk	only Risk		Y	Y
	oep:partOf	exactly 1 ImpactModel			Y
	sch:name	exactly 1 xsd:string	Y	Y	Y
	sch:description	exactly 1 xsd:string	Y	Y	Y
	sch:dateCreated	exactly 1 yyyy-mm-dd			y
Domain	owl:equivalentClass	{sdg1, sdg2, sdg3, …}		Y	Y
StakeholderOutcome	forStakeholder	exactly 1 Stakeholder		Y	Y
	fromPerspectiveOf	exactly 1 Stakeholder			Y
	hasImportance	only ImpactImportance		Y	Y
	isUnderserved	exactly 1 xsd:boolean		Y	Y
	intendedImpact	exactly 1 of {positive, negative, neutral}			Y
	hasIndicator	only Indicator		Y	Y
	hasImpactReport	only ImpactReport		Y	Y
ImpactImportance	hasMethod	exactly 1 xsd:string			Y
	sch:description	exactly 1 xsd:string			Y
	i72:value	exactly 1 of {high importance, moderate important, neutral, unimportant}		Y	Y
ImpactReport	forOrganization	exactly 1 Organization		Y	Y
	forOutcome	exactly 1 Outcome		Y	Y
	hasReportedImpact	exactly 1 of {positive, negative, neutral}		Y	Y
	hasImpactScale	exactly 1 ImpactScale		Y	Y
	hasImpactDepth	exactly 1 ImpactDepth		Y	Y

Class	Property	Value Restriction	Adoption Tiers		
			Embarking	Buidling	Aligned
	hasImpactDuration	exactly 1 ImpactDuration	Y	Y	
	hasExpectation	exactly 1 xsd:string	Y	Y	
	hasComment	exactly 1 xsd:string	Y	Y	
ImpactScale	hasIndicator	exactly Indicator	Y	Y	
	hasMethod	exactly 1 xsd:string		Y	
	sch:description	exactly 1 xsd:string	Y	Y	
	i72:value	exactly 1 i72:Measure	Y	Y	
	hasCounterfactual	only Counterfactual		Y	
ImpactDepth	hasIndicator	exactly Indicator	Y	y	
	hasMethod	exactly 1 xsd:string		Y	
	sch:description	exactly 1 xsd:string	Y	Y	
	i72:value	exactly 1 i72: Measure	Y	Y	
	hasCounterfactual	only Counterfactual		Y	
ImpactDuration	hasIndicator	exactly Indicator	Y	Y	
	hasStartDate	exactly 1 xsd:dateTime	y	y	
	hasEndDate	exactly 1 xsd:dateTime	y	y	
	hasMethod	exactly 1 xsd:string		y	
	sch:description	exactly 1 xsd:string	Y	Y	
	i72:valuethere	exactly 1 i72: Measure	Y	Y	
	hasCounterfactual	only Counterfactual		Y	
Counterfactual	i72:located_in	only i72:Feature			Y
	i72:for_time_interval	exactly 1 time:DateTImeInterval			Y
	hasMethod	exactly 1 xsd:string			Y
	sch:description	exactly 1 xsd:string			Y
	i72:value	i72: Measure			Y
Stakeholder	rdfs:subClassOf	(Organization or cafo:Person)	Y	Y	
	sch:name	exactly 1 xsd:string	Y	Y	
	sch:description	exactly 1 xsd:string	Y	Y	
	hasCatchmentArea	exactly 1 CatchmentArea	Y	Y	
	hasStakeholderCharacteristic	only StakeholderCharacteristic	Y	Y	
	performs	some Activity		Y	
	i72:located_in	only i72:Feature		Y	
	oep:partOf	only ImpactModel		Y	
BeneficiaryStakeholder	rdfs:subClassOf	Stakeholder	Y	Y	
	beneiftsFrom	min 1 Outcome	Y	Y	
	org:hasRole	only (Client, Community, Employee, Planet, Supplier)		Y	
ContributingStakeholder	rdfs:subClassOf	Stakeholder		Y	
	benefitsFrom	some Outcome		Y	
	contributes	min 1 Input		Y	
Client	rdfs:subClassOf	Stakeholder		Y	

			Adoption Tiers		
Class	Property	Value Restriction	Embarking	Building	Aligned
Employee	rdfs:subClassOf	Stakeholder			Y
Community	rdfs:subClassOf	Stakeholder			Y
Supplier	rdfs:subClassOf	Stakeholder			Y
Planet	rdfs:subClassOf	Stakeholder			Y
CatchmentArea	owl:equivalentTo	{local-catchmentArea, provincial-catchmentArea, national-catchmentArea, multinational-catchmentArea, global-catchmentArea }			Y
StakeholderCharacteristic	forStakeholder	only Stakeholder		Y	Y
	forOrganization	exactly 1 cids:Organization		Y	Y
	sch:identifier	exactly 1 xsd:string		Y	Y
	sch:name	exactly 1 xsd:string		Y	Y
	sch:description	exactly 1 xsd:string		Y	Y
Indicator	rdfs:subClassOf	cafo:Indicator	Y	Y	Y
	usesOutput	only Output			Y
	forOutcome	only Outcome		Y	Y
	hasBaseline	exactly 1 i72:Measure		Y	Y
	hasThreshold	exactly 1 i72:Measure		Y	Y
	hasMethod	exactly 1 (sur:Survey or Interview or Estimate or Computation)			Y
	hasDataSource	only Dataset			Y
	hasIndicatorReport (inverse forIndicator)	only IndicatorReport	Y	Y	Y
	hasAccess	only caco:Organization			Y
	hasIndicatorStandard	only IndicatorStandard		Y	Y
	i72:unit_of_measure	exactly 1 i72:Unit_of_measure			Y
	i72:value	exactly 1 i72:Measure			Y
	i72:for_time_interval	exactly 1 time:DateTImeInterval			Y
	sch:name	exactly 1 xsd:string	Y	Y	Y
	sch:description	exactly 1 xsd:string	Y	Y	Y
	sch:dateCreated	exactly 1 yyyy-mm-dd			Y
IndicatorStandard	forIndicator	only Indicator		Y	Y
	forOrganization	exactly 1 caco:Organization		Y	Y
	sch:identifier	exactly 1 xsd:string		Y	Y
	sch:name	exactly 1 xsd:string		Y	Y
	sch:description	exactly 1 xsd:string		Y	Y
	i72:value	exactly 1 i72:Measure			
IndicatorReport	forOrganization	exactly 1 Organization	Y	Y	Y
	forIndicator	exactly 1 Indicator	Y	Y	Y
	i72:value	exactly 1 i72:Measure	Y	Y	Y

Class	Property	Value Restriction	Embarking	Buidling	Aligned
	hasMethod	exactly 1 (sur:Survey or Interview or Estimate or Computation)			Y
	hasDataSource	only Dataset			Y
	i72:for_time_interval	exactly 1 time:DateTimeInterval		Y	Y
	hasAccess	only Organization			Y
	hasComment	only xsd:string	Y	Y	Y
	sch:name	exactly 1 xsd:string	Y	Y	Y
	sch:dateCreated	exactly 1 yyyy-mm-dd			Y
Dataset	rdfs:subClassOf	dcat:Dataset			Y
	i72:located_in	only i72:Feature			Y
	dcat:temporal	only time:DateTimeInterval			Y
	sch:identifier	exactly 1 xsd:string			Y
	sch:name	exactly 1 xsd:string			Y
	sch:description	exactly 1 xsd:string			Y
	sch:dateCreated	exactly 1 yyyy-mm-dd			Y
ImpactRisk	forOutcome	only Outcome		Y	Y
	hasLikelihood	exactly 1 {veryUnlikely , unlikely, likely, veryLikely, lowRisk, mediumRisk, highRisk}		Y	Y
	hasConsequence	exactly 1 {minimal, average, severe}			Y
	hasMitigation	exactly 1 xsd:string			Y
	sch:description	exactly 1 xsd:string		Y	Y
	sch:identifier	exactly 1 xsd:string		Y	Y
EvidenceRisk	rdfs:subClassOf	Risk		Y	Y
ExternalRisk	rdfs:subClassOf	Risk		Y	Y
StakeholderParticipationRisk	rdfs:subClassOf	Risk		Y	Y
DropOffRisk	rdfs:subClassOf	Risk		Y	Y
EfficiencyRisk	rdfs:subClassOf	Risk		Y	Y
ExecutionRisk	rdfs:subClassOf	Risk		Y	Y
AlignmentRisk	rdfs:subClassOf	Risk		Y	Y
EnduranceRisk	rdfs:subClassOf	Risk		Y	Y
UnexpectedImpactRisk	rdfs:subClassOf	Risk		Y	Y
ImpactModel	sch:name	exactly 1 xsd:string			Y
	sch:description	exactly 1 xsd:string			Y
	sch:dateCreated	exactly 1 xsd:date			Y
	forOrganization	exactly 1 Organization			Y
LogicModel	rdfs:subClassOf	ImpactModel			Y
	hasProgram	only Program			Y
	hasStakeholder	only Stakeholder			Y
	hasOutcome	only Outcome			Y

Class	Property	Value Restriction	Adoption Tiers		
			Embarking	Buidling	Aligned
	hasStakeholderOutcome	only StakeholderOutcome		Y	
	hasInput	only Input		Y	
	hasOutput	only Output		Y	
	hasActivity	only Activity		Y	
OutcomeChain	rdfs:subClassOf	ImpactModel		Y	
	hasOutcome	only Outcome		Y	
	hasActivity	only Activity		Y	
	hasIndicator	only Indicator		Y	
ImpactMeasurement	rdfs:subClassOf	ImpactModel		Y	
	hasStakeholder	only Stakeholder		Y	
	hasOutcome	only Outcome		Y	
	hasStakeholderOutcome	only StakeholderOutcome		Y	
	hasImpactRisk	only ImpactRisk		Y	
	hasIndicator	only Indicator		Y	
	hasImpactReport	only ImpactReport		Y	
Program	rdfs:subClassOf	Activity		Y	
	sch:name	exactly 1 xsd:string		Y	
	sch:description	exactly 1 xsd:string		Y	
	hasService	only Service		Y	
	hasOutcome	only Outcome		Y	
	hasContributingStakeholder	only ContributingStakeholder		Y	
	hasBeneficialStakeholder	only BeneficialStakeholder		Y	
	hasInput	only Input		Y	
	hasOutput	only Output		Y	
Service	rdfs:subClassOf	Activity		Y	
	oep:partOf	exactly 1 ImpactModel		Y	
	sch:name	exactly 1 xsd:string		Y	
	sch:description	exactly 1 xsd:string		Y	
	act:hasSubActivity	only Activity		Y	
	hasInput	only Input		Y	
	hasOutput	only Output		Y	
	hasOutcome	only Outcome		Y	
	hasContributingStakeholder	only ContributingStakeholder		Y	
	hasBeneficialStakeholder	only BeneficialStakeholder		Y	
	beneficiarySizeStart	exactly 1 xsd:positiveInteger		Y	
	beneficiarySizeEnd	exactly 1 xsd:positiveInteger		Y	
	i72:for_time_interval	exactly 1 time:DateTImeInterval		Y	
Activity	rdfs:subClassOf	act:Activity		Y	
	canProduce	only Outcome		Y	
	oep:partOf	exactly 1 ImpactModel		Y	
	hasInput	only Input		Y	

Class	Property	Value Restriction	Embarking	Buidling	Aligned
	hasOutput	only Output			Y
	hasCode	only ActivityCode			Y
	act:subActivityOf	only (Service or Activity)			Y
ActivityCode	forOrganization	exactly 1 Organization			Y
	sch:identifier	exactly 1 xsd:string			Y
	sch:name	exactly 1 xsd:string			Y
	sch:description	exactly 1 xsd:string			Y
Input	eof:partOf	exactly 1 ImpactModel			Y
	inputFor	only (Program or Service or Activity)			Y
	hasContributingStakeholder	only ContributingStakeholder			Y
	hasType	exactly 1 act:Resource			Y
	hasPlannedAmount	exactly 1 i72:Measure			Y
	hasActualAmount	exactly 1 i72:Measure			Y
	i72:for_time_interval	only time:DateTimeInterval			Y
	sch:name	exactly 1 xsd:string			Y
	sch:description	exactly 1 xsd:string			Y
FinancialInput	rdfs:subClassOf	Input			Y
	hasType	only FinancialResource			Y
	hasAmount	exactly 1 (i72:Quantity and i72:unit_of_measure i72:Monetary_unit)			Y
SkillInput	rdfs:subClassOf	Input			Y
	hasType	only SkillResource			Y
PhysicalInput	rdfs:subClassOf	Input			Y
	hasType	only PhysicalResource			Y
Output	oep:partOf	Exactly 1 ImpactModel			Y
	forActivity	only (Service or Activity)			Y
	i72:value	exactly 1 i72:Measure			Y
	produces	exactly 1 act:Resource			Y
	usedByIndicator	only Indicator			Y
	sch:name	exactly 1 xsd:string			Y
	sch:description	exactly 1 xsd:string			Y

Adoption Tiers