Revised Summary of Syntax Changes – 29 September 1997

type_definition ::=
    . . .
  | derived_type_definition

derived_type_definition ::=
  [**abstract**] **new** *parent*_subtype_indication [record_extension_part]

record_type_definition ::= [[**abstract**] **tagged**] [**limited**] record_definition

record_definition ::=
    record
      element_declaration
      { element_declaration }
    end record [*record_type*_simple_name]
  | **null record**

record_extension_part ::= **with** record_definition

~~abstract_subprogram_declaration ::= subprogram_specification **is abstract** ;~~

subprogram_declaration ::= subprogram_specification [**is abstract**] ;

name ::=
    . . .
  | type_conversion

type_conversion ::=
    type_mark (expression)
  | type_mark (name)

aggregate ::= record_aggregate | extension_aggregate | array_aggregate

record_aggregate ::= (record_element_association_list)

record_element_association_list ::=
    element_association_list
  | **null record**

extension_aggregate ::= (ancestor_part **with** record_element_association_list)

ancestor_part ::= expression | type_mark

array_aggregate ::= (element_association_list)

element_association_list ::=
  element_association { , element_association }

entity_declarative_item ::=
    . . .
  | package_declaration
  | package_body_declaration
  | generic_subprogram_instantiation
  | generic_package_instantiation

block_declarative_item ::=
. . .
| package_declaration
| package_body_declaration
| generic_subprogram_instantiation
| generic_package_instantiation

process_declarative_item ::=
. . .
| package_declaration
| package_body_declaration
| generic_subprogram_instantiation
| generic_package_instantiation

subprogram_declarative_item ::=
. . .
| package_declaration
| package_body_declaration
| generic_subprogram_instantiation
| generic_package_instantiation

package_declarative_item ::=
. . .
| package_declaration
| generic_subprogram_instantiation
| generic_package_instantiation

package_body_declarative_item ::=
. . .
| package_declaration
| package_body_declaration
| generic_subprogram_instantiation
| generic_package_instantiation

primary_unit ::=
. . .
| generic_package_instantiation

package_declaration ::=
package identifier **is**
[*formal*_generic_clause]
package_declarative_part
[**private**
package_private_declarative_part]
end [**package**] [*package*_simple_name] ;

package_private_declarative_part ::= { package_private_declarative_item }

package_private_declarative_item ::=
subprogram_declaration~~declarative_item~~

| type_declaration
| subtype_declaration
| constant_declaration
| *shared* variable_declaration
| file_declaration
| alias_declaration
| attribute_declaration
| attribute_specification
| disconnection_specification
| use_clause
| group_template_declaration
| group_declaration
| package_declaration
| generic_subprogram_instantiation
| generic_package_instantiation

type_declaration ::=
. . .
| private_type_declaration
| private_type_extension

private_type_declaration ::=
type identifier **is** [[**abstract**] **tagged**] [**limited**] [**access**] **private** ;

private_extension_declaration ::=
type identifier **is** [**abstract**] **new** *ancestor*_subtype_indication **with** [**access**] **private** ;

package_declaration ::=
package identifier **is**
[*formal*_generic_clause]
package_declarative_part
[**private**
package_private_declarative_part]
end [**package**] [*package*_simple_name] ;

subprogram specification ::=
procedure designator
[**generic** (generic_list)] [(formal_parameter_list)]
| [**pure** | **impure**] **function** designator
[**generic** (generic_list)] [(formal_parameter_list)] **return** type_mark

generic_subprogram_instantiation ::=
~~[~~ subprogram_kind ~~]~~ designator **is new** *generic_subprogram*_name
[generic_map_aspect] ;

generic_package_instantiation ::=
package identifier **is new** *generic_package*_name
[generic_map_aspect] ;

actual_designator ::=
. . .

| type_mark
| *subprogram*_name
| *package_instance*_name

interface_declaration ::=
. . .
| interface_type_declaration
| interface_subprogram_declaration
| interface_package_declaration

interface_type_declaration ::=
type identifier **is** interface_type_definition ~~;~~

interface_type_definition ::=
interface_private_type_definition
| interface_derived_type_definition
| interface_discrete_type_definition
| interface_integer_type_definition
| interface_physical_type_definition
| interface_floating_type_definition
| interface_array_type_definition
| interface_access_type_definition
| interface_file_type_definition

interface_private_type_definition ::= [[**abstract**] **tagged**] [**limited**] [**access**] **private**

interface_derived_type_definition ::= [**abstract**] **new** type_mark [**with** [**access**] **private**]

interface_discrete_type_definition ::= (<>)

interface_integer_type_definition ::= **range** <>

interface_physical_type_definition ::= **units** <>

interface_floating_type_definition ::= **range** <> . <>

interface_array_type_definition ::= array_type_definition

interface_access_type_definition ::= access_type_definition

interface_file_type_definition ::= file_type_definition

interface_subprogram_declaration ::=
subprogram_specification [**is** subprogram_default]

subprogram_default ::= name | <>

interface_package_declaration ::=
package identifier **is new** *generic_package*_name interface_package_actual_part ;

interface_package_actual_part ::=
generic map (<>)
| [generic_map_aspect]