New proposed identifier>4.10a (extendable and ITER compatible)			*as was not implemented up to 4.10a but should be if kept as is*			
			proposed relation with ITM grid_type(1:4)			
index	**name**	**description**	*grid_type(1) string*	*grid_type(2) string*	*grid_type(3) string*	*grid_type(4) string*
1	rz	cylindrical R,Z ala eqdsk, within the corresponding COCOS convention	*"1"*	*"rectangular"*	*"-1"*	"na"
2	polar	2D polar coordinates (rho, theta) with magnetic axis as center of grid; theta and values following the corresponding COCOS convention, theta=atan2(z-zaxis,r-raxis)≡polar angle	*"2"*	*"inverse rhopolar"*	*"3"*	"polar"
11	flux_psi_straight	**flux surface type** with psi as radial label, theta straight-field line (*mod(index,10)=1*), could be non-equidistant; magnetic axis as center of grid; following the corresponding COCOS convention	*"2"*	*"inverse psi"*	*"1"*	"straight field line"
12	flux_psi_arc	flux surface type with psi as radial label, theta to have equal arc (*mod(index,10)=2*)	*"2"*	*"inverse psi"*	*"2"*	"equal arc"
13	flux_psi_polar	flux surface type with psi as radial label, theta as polar angle, could be non-equidistant	*"2"*	*"inverse psi"*	*"3"*	"polar"
21	flux_rhopolnorm_straight	flux surface type with radial label is sqrt[(psi-psi_axis)/(psi_edge-psi_axis)] and theta straight-field line	*"2"*	*"inverse rhopolnorm"*	*"1"*	"straight field line"
22	flux_rhopolnorm_arc	flux surface type with radial label is sqrt[(psi-psi_axis)/(psi_edge-psi_axis)], theta to have equal arc	*"2"*	*"inverse rhopolnorm"*	*"2"*	"equal arc"
23	flux_rhopolnorm_polar	same as 13 but radial label is sqrt[(psi-psi_axis)/(psi_edge-psi_axis)], theta as polar angle, could be non-equidistant	*"2"*	*"inverse rhopolnorm"*	*"3"*	"polar"
31	flux_rhotornorm_straight	flux surface type with radial label is sqrt[Phi/Phi_edge], Phi being toroidal flux and theta straight-field line	*"2"*	*"inverse rhotornorm"*	*"1"*	"straight field line"
32	flux_rhotornorm_arc	flux surface type with radial label is sqrt[Phi/Phi_edge], Phi being toroidal flux, theta to have equal arc	*"2"*	*"inverse rhotornorm"*	*"2"*	"equal arc"
33	flux_rhotornorm_polar	flux surface type with radial label is sqrt[Phi/Phi_edge], Phi being toroidal flux, theta as polar angle, could be non-equidistant	*"2"*	*"inverse rhotornorm"*	*"3"*	"polar"
41	flux_rhopol_straight	flux surface type with radial label is sqrt[psi-psi_axis] and theta straight-field line	*"2"*	*"inverse rhopol"*	*"1"*	"straight field line"
42	flux_rhopol_arc	flux surface type with radial label is sqrt[psi-psi_axis], theta to have equal arc	*"2"*	*"inverse rhopol"*	*"2"*	"equal arc"
43	flux_rhopol_polar	same as 13 but radial label is sqrt[psi-psi_axis], theta as polar angle, could be non-equidistant	*"2"*	*"inverse rhopol"*	*"3"*	"polar"
51	flux_rhotor_straight	flux surface type with radial label is sqrt[Phi/pi/B0], Phi being toroidal flux and theta straight-field line	*"2"*	*"inverse rhotor"*	*"1"*	"straight field line"
52	flux_rhotor_arc	flux surface type with radial label is sqrt[Phi/pi/B0], Phi being toroidal flux, theta to have equal arc	*"2"*	*"inverse rhotor"*	*"2"*	"equal arc"
53	flux_rhotor_polar	flux surface type with radial label is sqrt[Phi/pi/B0], Phi being toroidal flux, theta as polar angle, could be non-equidistant	*"2"*	*"inverse rhotor"*	*"3"*	"polar"
91	irregular_rz	irregular grid, thus give list of vertices in dim1(1:ndim1), dim2(1:ndim1) and then all fields are on values(1:ndim1,1); needs to know if R,Z, psi,theta for dim1, dim2? Used with connect and only for rz	*"3"*	*"irregular rz"*	*"-1"*	"na"

IMAS grid_type/ index	**IMAS grid_type/name**	**IMAS grid_type/description**
1	rectangular	cylindrical R,Z ala eqdsk, within the corresponding COCOS convention (COCOS=11 is assumed in ITER)
2	inverse rhopolar_polar	2D polar coordinates (rho, theta) with magnetic axis as center of grid; theta and values following the corresponding COCOS convention, theta=atan2(z-zaxis,r-raxis)≡polar angle (COCOS=11 is assumed in ITER)
11	inverse psi_straight field line	flux surface type with psi as radial label, theta straight-field line (mod(index,10)=1), could be non-equidistant; magnetic axis as center of grid; following the corresponding COCOS convention (COCOS=11 is assumed in ITER)
12	inverse psi_equal arc	flux surface type with psi as radial label, theta to have equal arc (mod(index,10)=2) (COCOS=11 is assumed in ITER)
13	inverse psi_polar	flux surface type with psi as radial label, theta as polar angle, could be non-equidistant (COCOS=11 is assumed in ITER)
21	inverse rhopolnorm_straight field line	flux surface type with radial label is sqrt[(psi-psi_axis)/(psi_edge-psi_axis)] and theta straight-field line (COCOS=11 is assumed in ITER)
22	inverse rhopolnorm_equal arc	flux surface type with radial label is sqrt[(psi-psi_axis)/(psi_edge-psi_axis)], theta to have equal arc (COCOS=11 is assumed in ITER)
23	inverse rhopolnorm_polar	same as 13 but radial label is sqrt[(psi-psi_axis)/(psi_edge-psi_axis)], theta as polar angle, could be non-equidistant (COCOS=11 is assumed in ITER)
31	inverse rhotornorm_straight field line	flux surface type with radial label is sqrt[Phi/Phi_edge], Phi being toroidal flux and theta straight-field line (COCOS=11 is assumed in ITER)
32	inverse rhotornorm_equal arc	flux surface type with radial label is sqrt[Phi/Phi_edge], Phi being toroidal flux, theta to have equal arc (COCOS=11 is assumed in ITER)
33	inverse rhotornorm_polar	flux surface type with radial label is sqrt[Phi/Phi_edge], Phi being toroidal flux, theta as polar angle, could be non-equidistant (COCOS=11 is assumed in ITER)
41	inverse rhopol_straight field line	flux surface type with radial label is sqrt[psi-psi_axis] and theta straight-field line (COCOS=11 is assumed in ITER)
42	inverse rhopol_equal arc	flux surface type with radial label is sqrt[psi-psi_axis], theta to have equal arc (COCOS=11 is assumed in ITER)
43	inverse rhopol_polar	same as 13 but radial label is sqrt[psi-psi_axis], theta as polar angle, could be non-equidistant (COCOS=11 is assumed in ITER)
51	inverse rhotor_straight field line	flux surface type with radial label is sqrt[Phi/pi/B0], Phi being toroidal flux and theta straight-field line (COCOS=11 is assumed in ITER)
52	inverse rhotor_equal arc	flux surface type with radial label is sqrt[Phi/pi/B0], Phi being toroidal flux, theta to have equal arc (COCOS=11 is assumed in ITER)
53	inverse rhotor_polar	flux surface type with radial label is sqrt[Phi/pi/B0], Phi being toroidal flux, theta as polar angle, could be non-equidistant (COCOS=11 is assumed in ITER)
91	irregular rz_na	irregular grid, thus give list of vertices in dim1(1:ndim1), dim2(1:ndim1) and then all fields are on values(1:ndim1,1); needs to know if R,Z, psi,theta for dim1, dim2? Used with connect and only for rz (COCOS=11 is assumed in ITER)